

PART 4 - GENERAL MORTALITY STATISTICS

Chart 4.1
Mortality Rates, Leading Causes: Ages 1 to 14 Years

The two leading causes of death for American Indians and Alaska Natives ages 1 to 14 (1989–1991) were accidents and congenital anomalies. For the U.S. All Races and White populations (1990), they were accidents and malignant neoplasms.

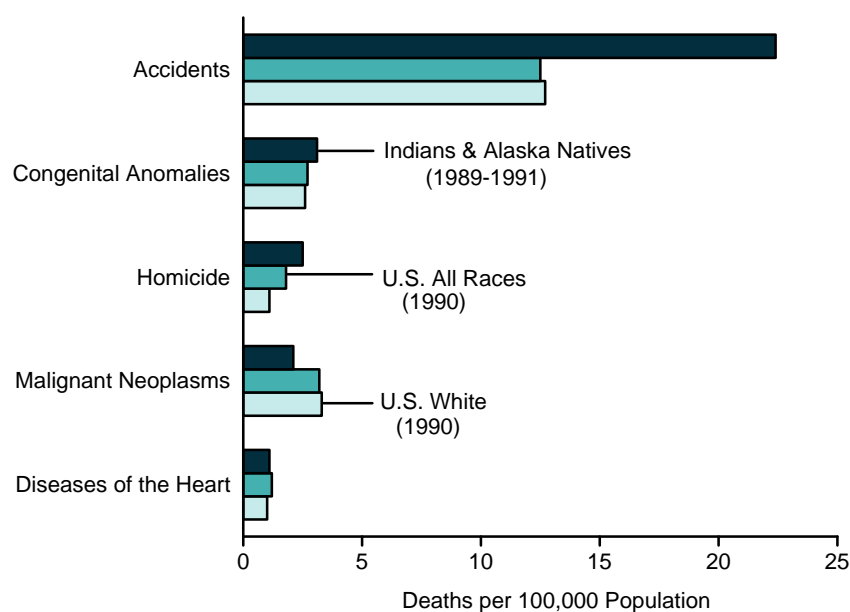


Table 4.1
Ten Leading Causes of Death for Decedents 1 to 14 Years of Age

American Indians and Alaska Natives, IHS Service Area, 1989–1991, and U.S. All Races and White Populations, 1990
Rate per 100,000 Population

Cause of Death and ICD-9 Code(s)	American Indian and Alaska Native		U.S. All Races Rate	U.S. White Rate	Ratio American Indian and Alaska Native to:	
	Number	Rate			U.S. All Races	U.S. White
All Causes	510	41.8	30.8	27.8	1.4	1.5
Accidents	273	22.4	12.5	12.7	1.8	1.8
Motor vehicle	132	10.8	6.0	5.7	1.8	1.9
Other accidents	141	11.5	6.5	6.9	1.8	1.7
Congenital anomalies	38	3.1	2.7	2.6	1.1	1.2
Homicide	30	2.5	1.8	1.1	1.4	2.3
Malignant neoplasms	26	2.1	3.2	3.3	0.7	0.6
Diseases of the heart	13	1.1	1.2	1.0	0.9	1.1
Suicide	10	0.8	0.5	0.6	1.6	1.3
Pneumonia and influenza	7	0.6	0.6	0.5	1.0	1.2
Septicemia, 038	5	0.4	0.3	0.3	1.3	1.3
Certain conditions originating in the perinatal period, 760-779	4	0.3	0.3	0.3	1.0	1.0
Benign neoplasms, 210-239	4	0.3	0.4	0.4	0.8	0.8
All other causes	99					

NOTE: For ICD-9 codes utilized not shown above, refer to Tables 4.6 and 4.7.

Chart 4.2
Mortality Rates, Leading Causes: Ages 15 to 24 Years

The two leading causes of death for American Indians and Alaska Natives ages 15 to 24 years (1989–1991) and U.S. Whites (1990) were accidents and suicide. For the U.S. All Races (1990), they were accidents and homicide.

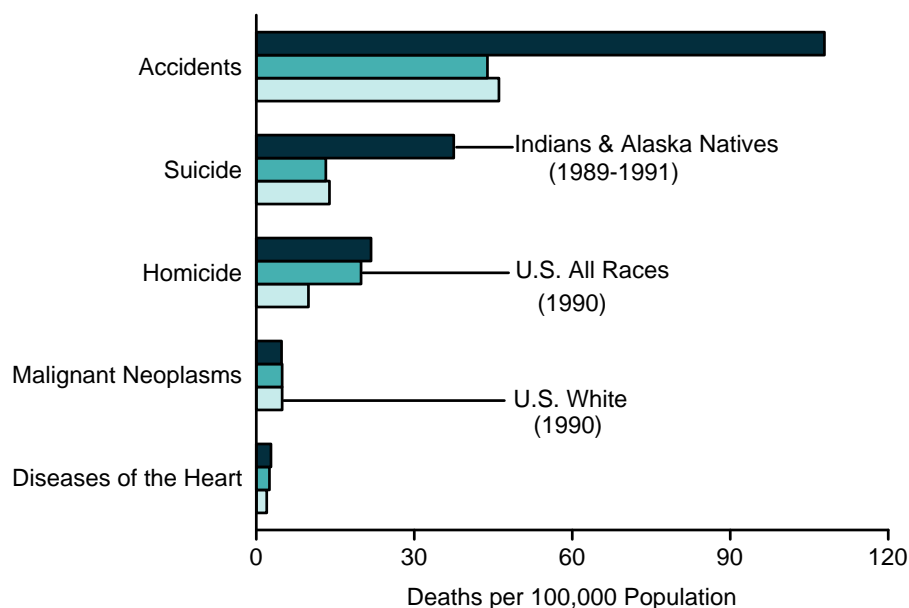


Table 4.2
Ten Leading Causes of Death for Decedents 15 to 24 Years of Age

American Indians and Alaska Natives, IHS Service Area, 1989–1991 and U.S. All Races and White Populations, 1990
Rate per 100,000 Population

Cause of Death	American Indian and Alaska Native		U.S. All Races Rate	U.S. White Rate	Ratio American Indian and Alaska Native to:	
	Number	Rate			U.S. All Races	U.S. White
All Causes	1,280	199.3	99.2	89.7	2.0	2.2
Accidents	693	107.9	43.9	46.1	2.5	2.3
Motor vehicle	490	76.3	34.1	36.5	2.2	2.1
Other accidents	203	31.6	9.8	9.7	3.2	3.3
Suicide	241	37.5	13.2	13.9	2.8	2.7
Homicide	140	21.8	19.9	9.9	1.1	2.2
Malignant neoplasms	31	4.8	4.9	4.9	1.0	1.0
Diseases of the heart	18	2.8	2.5	2.0	1.1	1.4
Chronic liver disease and cirrhosis	6	0.9	0.1	0.1	9.0	9.0
Congenital anomalies, 740–759	6	0.9	1.3	1.3	0.7	0.7
Pneumonia and influenza	6	0.9	0.6	0.5	1.5	1.8
Viral hepatitis, 070	4	0.6	0.1	0.1	6.0	6.0
Nephritis, nephrotic syndrome and nephrosis	4	0.6	0.2	0.1	3.0	6.0
Human immunodeficiency virus (HIV) infection, 042-044	4	0.6	1.5	1.0	0.4	0.6
All other causes	127					

NOTE: For ICD-9 codes utilized refer to Tables 4.6 and 4.7.

Chart 4.3
Mortality Rates, Leading Causes: Ages 25 to 44 Years

The two leading causes of death for American Indians and Alaska Natives ages 25 to 44 years (1989–1991) were accidents and chronic liver disease and cirrhosis. For the U.S. All Races and White populations (1990), they were accidents and malignant neoplasms.

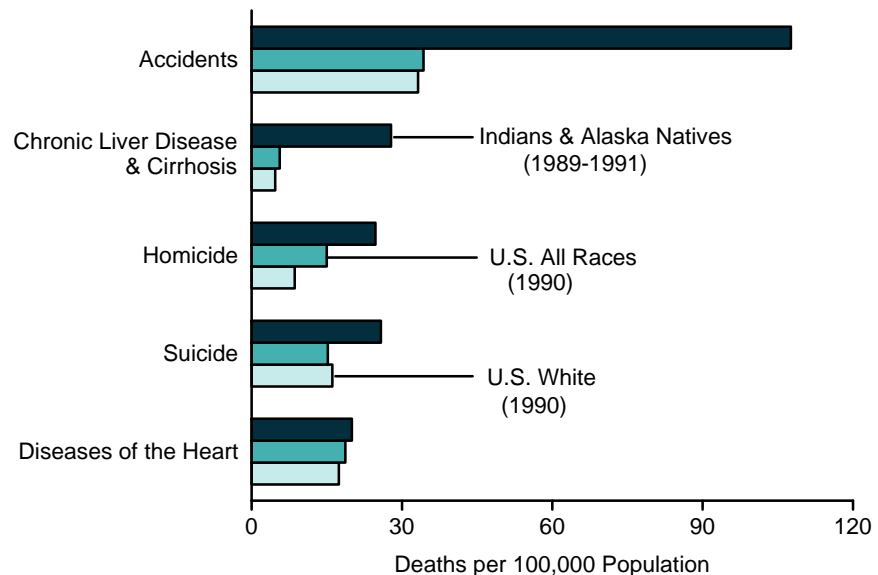


Table 4.3
Ten Leading Causes of Death for Decedents 25 to 44 Years of Age

American Indians and Alaska Natives, IHS Service Area, 1989–1991 and U.S. All Races and White Populations, 1990
Rate per 100,000 Population

Cause of Death	American Indian and Alaska Native		U.S. All Races Rate	U.S. White Rate	Ratio American Indian and Alaska Native to:	
	Number	Rate			U.S. All Races	U.S. White
All Causes	3,238	302.5	178.2	153.8	1.7	2.0
Accidents	1,152	107.6	34.3	33.2	3.1	3.2
Motor vehicle	693	64.7	20.5	20.3	3.2	3.2
Other accidents	459	42.9	13.9	12.9	3.1	3.3
Chronic liver disease and cirrhosis	304	28.4	5.6	4.7	5.1	6.0
Homicide	264	24.7	15.0	8.6	1.6	2.9
Suicide	262	24.5	15.2	16.1	1.6	1.5
Diseases of the heart	214	20.0	18.7	17.4	1.1	1.1
Malignant neoplasms	213	19.9	26.9	25.7	0.7	0.8
Pneumonia and influenza	58	5.4	2.7	1.9	2.0	2.8
Cerebrovascular diseases	55	5.1	4.2	3.1	1.2	1.6
Human immunodeficiency virus (HIV) infection, 042-044	51	4.8	23.3	18.8	0.2	0.3
Diabetes mellitus	44	4.1	2.7	2.4	1.5	1.7
All other causes	621					

NOTE: For ICD-9 codes utilized refer to Tables 4.6 and 4.7.

Chart 4.4
Mortality Rates, Leading Causes: Ages 45 to 64 Years

The two leading causes of death for American Indians and Alaska Natives ages 45 to 64 years (1989-1991) were diseases of the heart and malignant neoplasms. This ranking was the same for the U.S. All Races and White populations (1990).

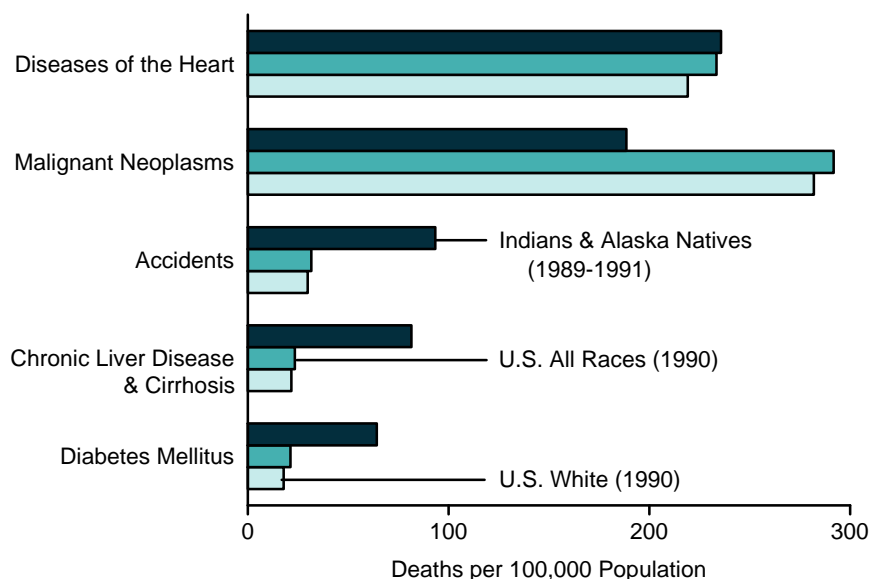


Table 4.4
Ten Leading Causes of Death for Decedents 45 to 64 Years of Age

American Indians and Alaska Natives, IHS Service Area, 1989-1991, and U.S. All Races and White Populations, 1990
Rate per 100,000 Population

Cause of Death	American Indian and Alaska Native		U.S. All Races Rate	U.S. White Rate	Ratio American Indian and Alaska Native to:	
	Number	Rate			U.S. All Races	U.S. White
All Causes	4,562	943.2	804.2	751.6	1.2	1.3
Diseases of the heart	1,140	235.7	233.4	219.1	1.0	1.1
Malignant neoplasms	912	188.6	291.8	281.9	0.6	0.7
Accidents	453	93.7	31.6	29.8	3.0	3.1
Motor vehicle	231	47.8	15.8	15.1	3.0	3.2
Other accidents	222	45.9	15.9	14.7	2.9	3.1
Chronic liver disease and cirrhosis	394	81.5	23.4	21.7	3.5	3.8
Diabetes mellitus	311	64.3	21.2	17.9	3.0	3.6
Cerebrovascular diseases	160	33.1	32.1	26.5	1.0	1.2
Pneumonia and influenza	133	27.5	12.3	10.8	2.2	2.5
Chronic obstructive pulmonary diseases and allied cond.	87	18.0	27.3	27.6	0.7	0.7
Homicide	64	13.2	6.4	4.6	2.1	2.9
Nephritis, nephrotic syndrome, and nephrosis	63	13.0	5.3	3.9	2.5	3.3
All other causes	845					

NOTE: For ICD-9 codes utilized refer to Tables 4.6 and 4.7.

Chart 4.5
Mortality Rates, Leading Causes: Ages 65+ Years

The two leading causes of death for American Indians and Alaska Natives, ages 65 and over (1989–1991), were diseases of the heart and malignant neoplasms. For the U.S. All Races and White populations (1990), they were also diseases of the heart and malignant neoplasms.

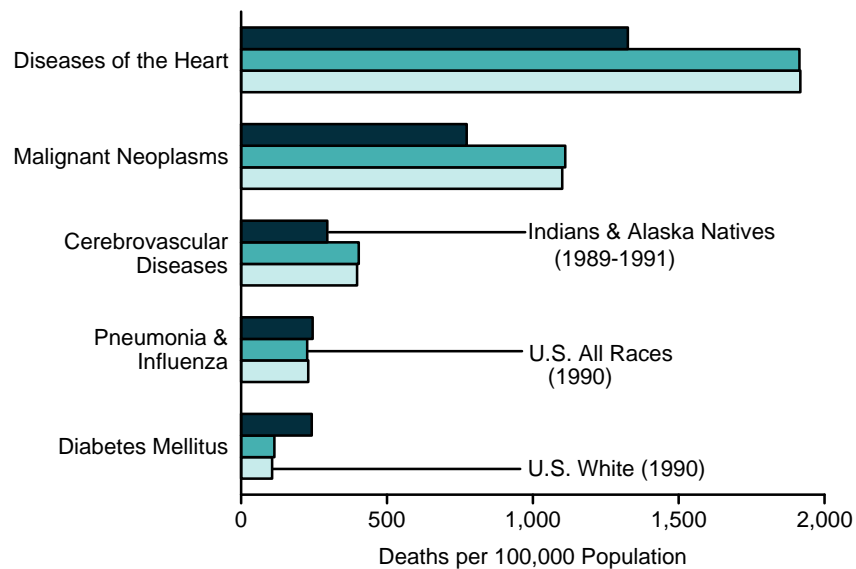


Table 4.5
Ten Leading Causes of Death for Decedents 65 Years Old and Older

American Indians and Alaska Natives, IHS Service Area, 1989–1991, and U.S. All Races and White Populations, 1990
Rate per 100,000 Population

Cause of Death and ICD-9 Code(s)	American Indian and Alaska Native		U.S. All Races Rate	U.S. White Rate	Ratio American Indian and Alaska Native to:	
	Number	Rate			U.S. All Races	U.S. White
All Causes	8,449	4,059.1	4,963.3	4,942.6	0.8	0.8
Diseases of the heart	2,759	1,325.5	1,914.1	1,917.3	0.7	0.7
Malignant neoplasms	1,610	773.5	1,111.4	1,100.8	0.7	0.7
Cerebrovascular diseases	615	295.5	403.5	397.8	0.7	0.7
Pneumonia and influenza	510	245.0	226.8	230.0	1.1	1.1
Diabetes mellitus	504	242.1	114.3	106.3	2.1	2.3
Chronic obstructive pulmonary diseases and allied cond.	323	155.2	234.1	243.8	0.7	0.6
Accidents	291	139.8	84.3	82.5	1.7	1.7
Motor vehicle	84	40.4	23.2	23.1	1.7	1.7
Other accidents	207	99.4	61.1	59.4	1.6	1.7
Nephritis, nephrotic syndrome, and nephrosis	174	83.6	55.7	51.5	1.5	1.6
Chronic liver disease and cirrhosis	148	71.1	33.5	34.0	2.1	2.1
Septicemia, 038	110	52.8	49.4	46.0	1.1	1.1
All other causes	1,405					

NOTE: For ICD-9 codes utilized not shown above, refer to Tables 4.6 and 4.7.

Chart 4.6
Mortality Rates for
Leading Causes, Indians
and Alaska Natives
(1989–1991)

The leading cause of death for American Indians and Alaska Natives (1989–1991) and the U.S. All Races and White populations (1990) was diseases of the heart. The second leading cause for Indians was accidents in contrast to malignant neoplasms for U.S. All Races and Whites.

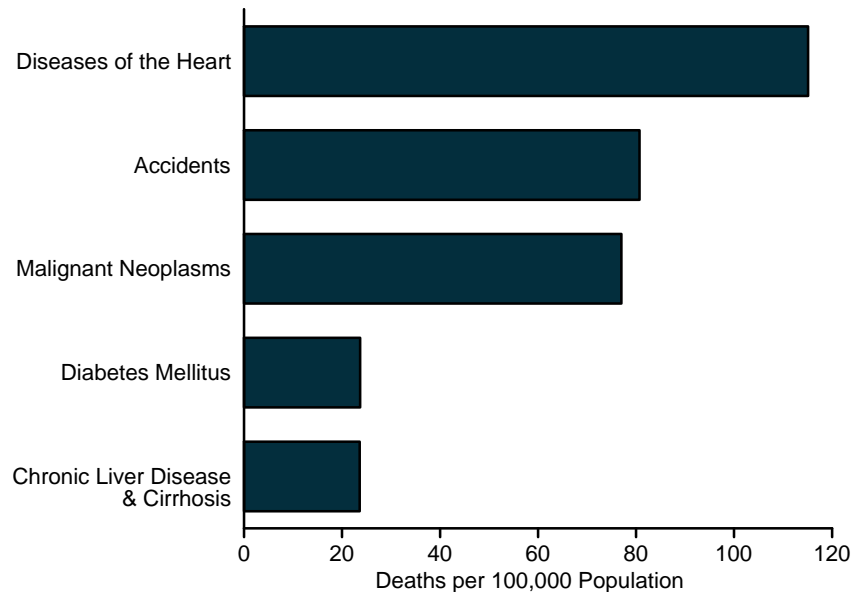


Table 4.6
Ten Leading Causes of
Death for Decedents of
All Ages

American Indians and
Alaska Natives, IHS Service
Area, 1989–1991

Rate per 100,000 Population

Cause of Death and ICD-9 Code(s)	Number	Rate
All Causes	19,084	526.4
Diseases of the heart, 390–398, 402, 404–429	4,173	115.1
Accidents, E800–E949	2,927	80.7
Motor vehicle, E810–E825	1,642	45.3
Other accidents, E800–E807, E826–E949	1,285	35.4
Malignant neoplasms, 140–208	2,793	77.0
Diabetes mellitus, 250	861	23.7
Chronic liver disease and cirrhosis, 571	854	23.6
Cerebrovascular diseases, 430–438	839	23.1
Pneumonia and influenza, 480–487	744	20.5
Suicide, E950–E959	571	15.7
Homicide and legal intervention, E960–E978	530	14.6
Chronic obstructive pulmonary diseases, 490–496	436	12.0
All other causes	4,356	

Chart 4.7
Mortality Rates, Leading Causes: Males, Indians, and Alaska Natives (1989–1991)

The two leading causes of death for Indian males (1989–1991) were diseases of the heart and accidents. For U.S. All Races and White males (1990), they were diseases of the heart and malignant neoplasms.

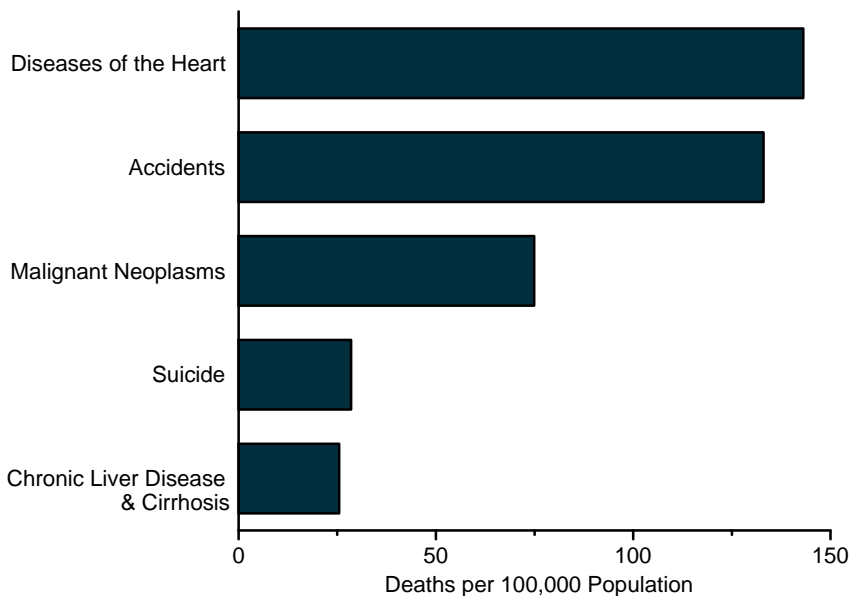


Chart 4.8
Mortality Rates, Leading Causes: Females, Indians, and Alaska Natives (1989–1991)

The two leading causes of death for Indian females (1989–1991) were diseases of the heart and malignant neoplasms. The same was true for U.S. All Races and White females in 1990.

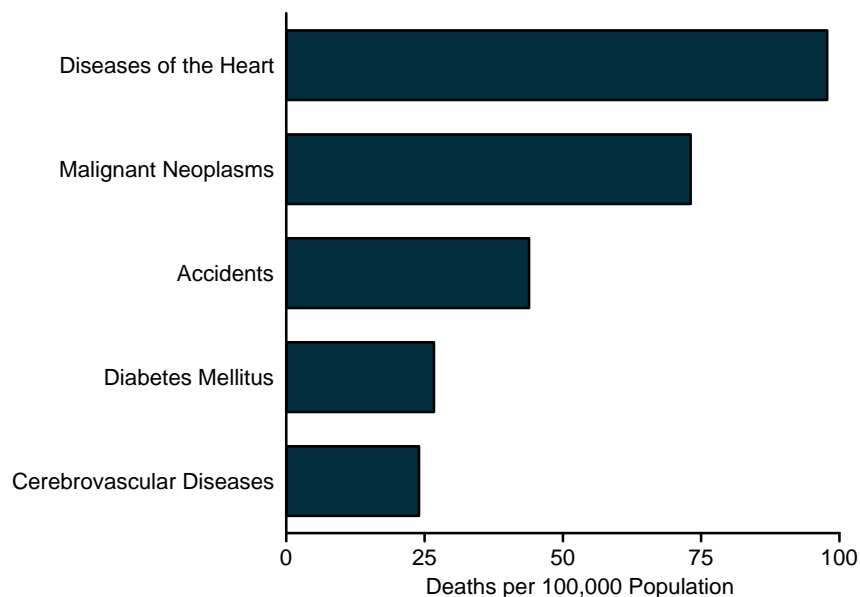


Table 4.7
Leading Causes of Death
by Sex

American Indians and
Alaska Natives, IHS Service
Area, 1989–1991

Rate per 100,000 Population

Male		
Cause of Death and ICD-9 Code	Number	Rate
All Causes	11,183	626.5
Diseases of the heart, 390–398, 402, 404–429	2,481	139.0
Accidents, E800–E949	2,164	121.2
Motor vehicle, E810–E825	1,173	65.7
Other accidents, E800–E807, E826–E949	991	55.5
Malignant neoplasms, 140–208	1,394	78.1
Suicide, E950–E959	493	27.6
Chronic liver disease and cirrhosis, 571	468	26.2
Pneumonia and influenza, 480–487	417	23.4
Homicide and legal intervention, E960–E978	398	22.3
Cerebrovascular diseases, 430–438	388	21.7
Diabetes mellitus, 250	357	20.0
Chronic obstructive pulmonary diseases and allied conditions, 490–496	256	14.3
All other causes	2,367	
Female		
Cause of Death and ICD-9 Code	Number	Rate
All Causes	7,901	429.3
Diseases of the heart, 390–398, 402, 404–429	1,692	91.9
Malignant neoplasms, 140–208	1,399	76.0
Accidents, E800–E949	763	41.5
Motor vehicle, E810–E825	469	25.5
Other accidents, E800–E807, E826–E949	294	16.0
Diabetes mellitus, 250	504	27.4
Cerebrovascular diseases, 430–438	451	24.5
Chronic liver disease and cirrhosis, 571	386	21.0
Pneumonia and influenza, 480–487	327	17.8
Chronic obstructive pulmonary diseases and allied conditions, 490–496	180	9.8
Congenital anomalies, 740-759	145	7.9
Nephritis, nephrotic syndrome, and nephrosis, 580–589	139	7.6
All other causes	1,915	

Chart 4.9
***Selected Age-Adjusted
Death Rates, Ratio of
Indians to U.S. All Races***

The American Indian and Alaska Native age-adjusted mortality rates for 1989-1991 were above those of the U.S. All Races (1990) for tuberculosis, chronic liver disease and cirrhosis, accidents, diabetes mellitus, homicide, pneumonia and influenza, and suicide. Indian rates were below those of the U.S. All Races for chronic obstructive pulmonary diseases, malignant neoplasms, and major cardiovascular diseases.

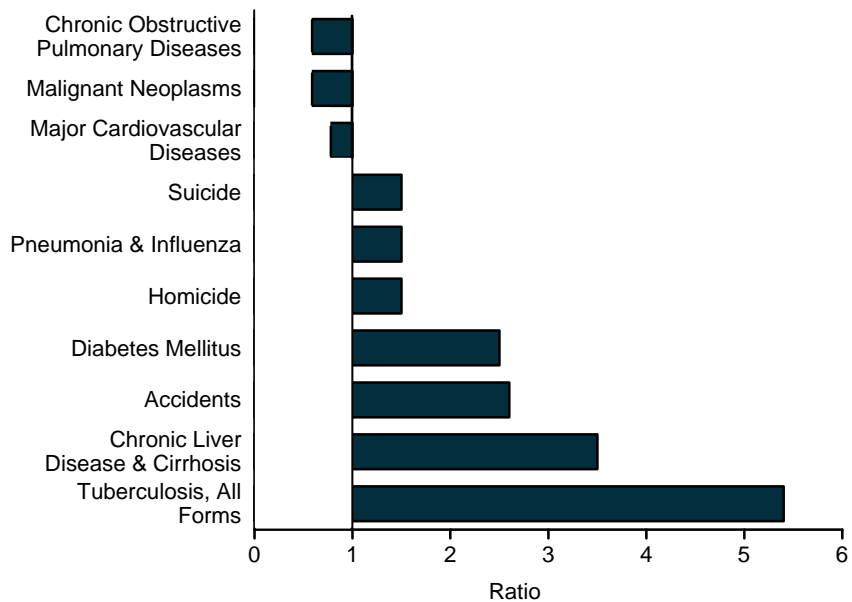


Table 4.9
***Age-Adjusted Mortality
Rates***

American Indians and Alaska Natives, IHS Service Area, 1989-1991, and U.S. All Races and White Populations, 1990

Rate per 100,000 Population

Cause of Death	Indian and Alaska Native	United States			Ratio American Indian and Alaska Native to:	
		All Races	White	All Other	U.S. All Races	U.S. White
All Causes	585.2	520.2	492.8	686.7	1.1	1.2
Major cardiovascular diseases	163.7	189.8	182.1	242.2	0.9	0.9
Diseases of heart	132.1	152.0	146.9	186.1	0.9	0.9
Cerebrovascular diseases	25.2	27.7	25.5	43.1	0.9	1.0
Atherosclerosis	2.0	2.7	2.7	2.7	0.7	0.7
Hypertension	1.6	1.9	1.5	5.1	0.7	1.1
Accidents	86.0	32.5	31.8	36.8	2.6	2.7
Motor vehicle	48.4	18.5	18.6	18.0	2.6	2.6
All other	37.6	14.0	13.2	18.8	2.7	2.8
Malignant neoplasms	94.5	135.0	131.5	159.7	0.7	0.7
Chronic liver disease and cirrhosis	30.3	8.6	8.0	12.0	3.5	3.8
Diabetes mellitus	29.7	11.7	10.4	21.6	2.5	2.9
Pneumonia and influenza	20.5	14.0	13.4	17.9	1.5	1.5
Suicide	16.5	11.5	12.2	7.1	1.4	1.4
Homicide	15.3	10.2	5.9	31.4	1.5	2.6
Chronic obstructive pulmonary diseases and allied conditions	13.8	19.7	20.1	15.2	0.7	0.7
Tuberculosis, all forms	2.7	0.5	0.3	1.9	5.4	9.0

SOURCE: U.S. Mortality Rates: Monthly Vital Statistics Report, NCHS, DHHS Pub. No. (PHS)93-1120, Vol. 41, No. 7, Supplement, Jan. 7, 1993, Table 12

Chart 4.10

***Age-Specific Death Rates,
Ratio of Indians and
Alaska Natives (1989–
1991) to U.S. All Races
(1990)***

The age-specific death rate for American Indians and Alaska Natives (1989-1991) was 1.4 or more times the U.S. All Races rate (1990) for age groups 1 through 54. The Indian rate was less than the U.S. All Races rate for age groups over 64.

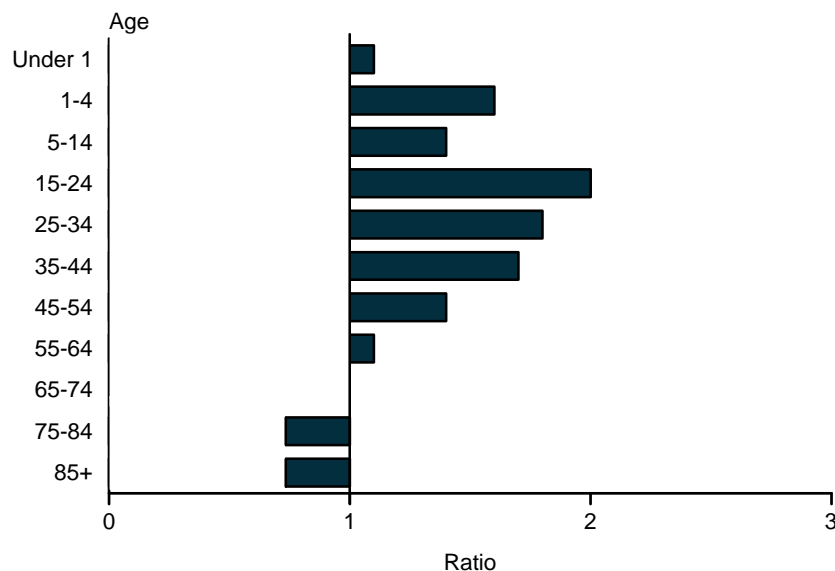


Chart 4.11

***Age-Specific Death Rates,
Ratio of Indians and
Alaska Natives (1989–
1991) to U.S. White
(1990)***

The age-specific death rate for American Indians and Alaska Natives (1989-1991) was about double the U.S. White rate (1990) for age groups 1 to 4 and 15 through 44. The Indian rate was less than the U.S. White rate for age groups over 64.

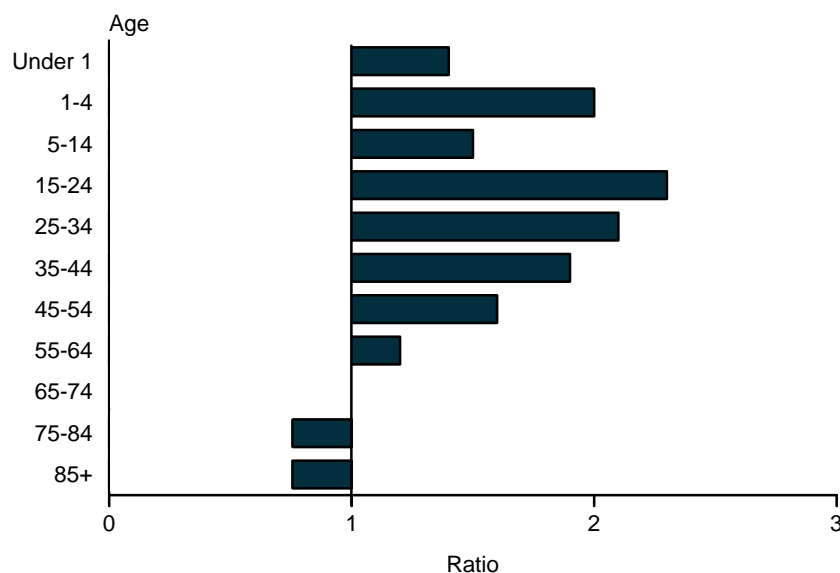


Table 4.10
Age-Specific Mortality
Rates

American Indians and
Alaska Natives, IHS Service
Area, 1989–1991, and
Selected U.S. Populations,
1990

Rate per 100,000 Population

Age Group	Indian and Alaska Native		U.S. Rate			Ratio American Indian and Alaska Native to:	
	Number	Rate	All Races	White	All Other	U.S. All Races	U.S. White
Under 1	1,038	1,085.9	971.9	795.5	1,646.5	1.1	1.4
1–4	251	73.2	46.8	41.1	69.3	1.6	1.8
5–14	259	33.1	24.0	22.3	31.3	1.4	1.5
15–24	1,280	199.3	99.2	89.7	139.9	2.0	2.2
25–34	1,545	252.5	139.2	119.3	236.4	1.8	2.1
35–44	1,693	369.2	223.2	192.8	389.8	1.7	1.9
45–54	1,901	664.3	473.4	427.2	758.7	1.4	1.6
55–64	2,661	1,347.1	1,196.9	1,129.6	1,675.6	1.1	1.2
65–74	3,287	2,555.9	2,648.6	2,573.1	3,301.9	1.0	1.0
75–84	3,142	5,055.0	6,007.2	5,963.6	6,434.3	0.8	0.8
85+	2,020	11,614.5	15,327.4	15,464.8	13,893.5	0.8	0.8

SOURCE: U.S. Data by Race: National Center for Health Statistics, HHS, Monthly Vital Statistics Report, Vol. 41, No. 7, Supplement Advance Report—Final Mortality Statistics, 1990, Table 9, and Final Mortality Statistics, 1990, NCHS Volume II, Part A, Table 1–10.

Chart 4.12
Deaths by Age

Of all American Indian and Alaska Native people who died during 1989–1991, 32 percent were under 45 years of age. This compared to 11 percent for the U.S. All Races population (1990).

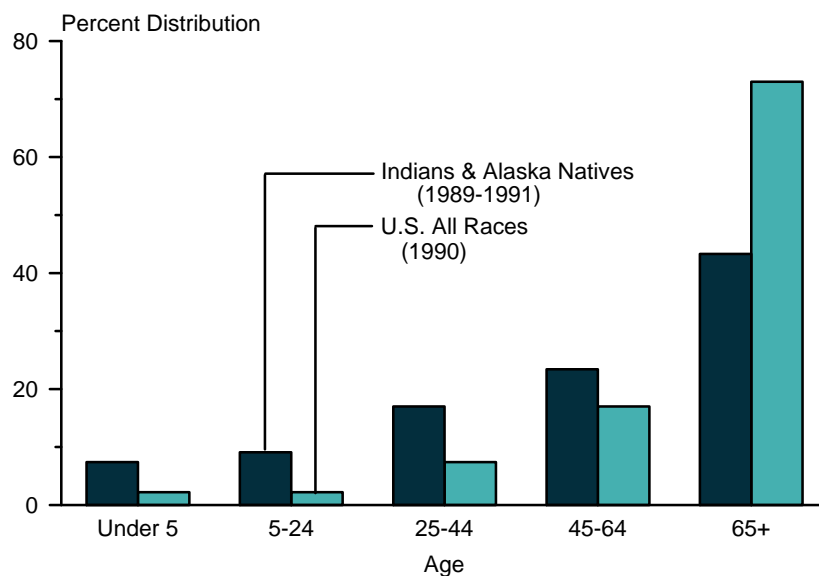


Chart 4.13
Deaths by Age and Race

23 percent of Black decedents and 9 percent of White decedents in 1990 were under 45 years of age.

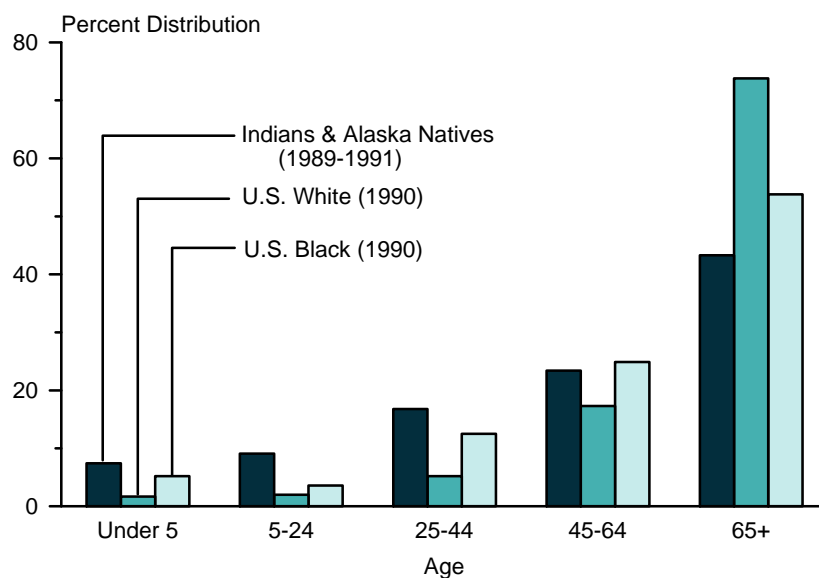


Chart 4.14
Deaths by Age and Sex,
Indians and Alaska
Natives (1989–1991)

37 percent of Indian male deaths (1989–1991) pertained to ages under 45. This compared with about 25 percent for Indian female deaths.

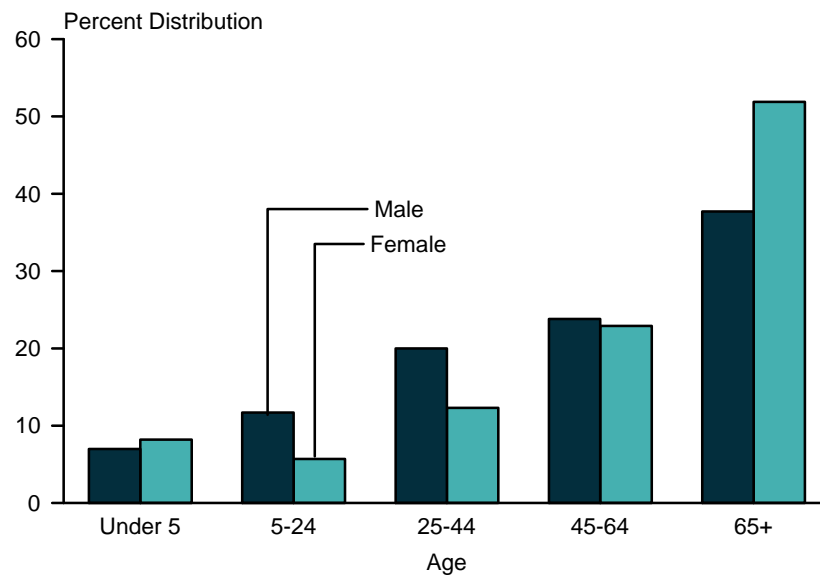


Table 4.12
Number and Percent
Distribution of Deaths by
Age and Sex

American Indians and
 Alaska Natives, IHS Service
 Area, 1989–1991, and
 Selected U.S. Populations,
 1990

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All Ages	19,084	100.0	11,183	100.0	7,901	100.0
Under 1	1,038	5.4	567	5.1	471	6.0
1 to 4	251	1.3	154	1.4	97	1.2
5 to 14	259	1.4	161	1.4	98	1.2
15 to 24	1,280	6.7	976	8.7	304	3.8
25 to 34	1,545	8.1	1,140	10.2	405	5.1
35 to 44	1,693	8.9	1,132	10.1	561	7.1
45 to 54	1,901	10.0	1,162	10.4	739	9.4
55 to 64	2,661	13.9	1,561	14.0	1,100	13.9
65 to 74	3,287	17.2	1,823	16.3	1,464	18.5
75 to 84	3,142	16.5	1,603	14.3	1,539	19.5
85 and over	2,020	10.6	900	8.0	1,120	14.2
Age Not Stated	7	0.0	4	0.0	3	0.0

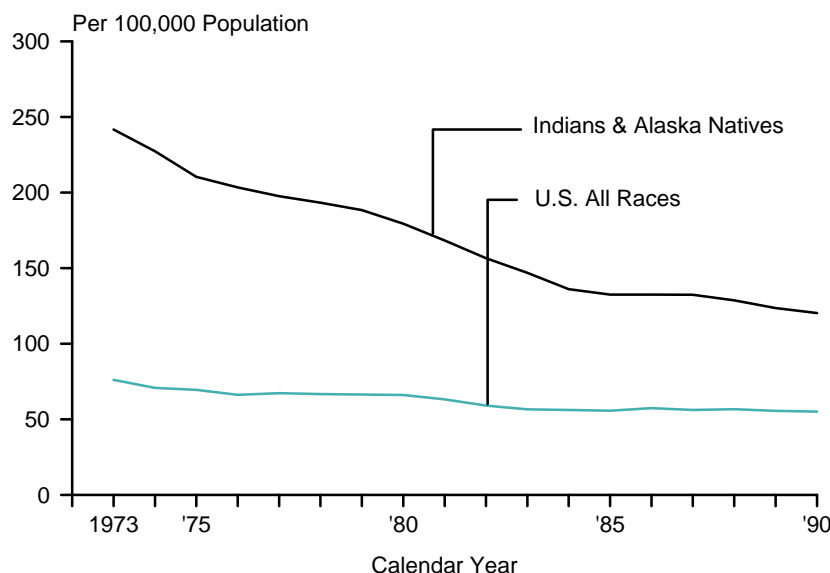
United States			
Age Group	All Races	White	Black
Number of Deaths, All Ages	2,148,463	1,853,254	265,498
Percent Distribution, All Ages	100.0	100.0	100.0
Under 1	1.8	1.3	4.6
1 to 4	0.3	0.3	0.7
5 to 14	0.4	0.3	0.7
15 to 24	1.7	1.5	3.2
25 to 34	2.8	2.3	6.0
35 to 44	3.9	3.3	7.7
45 to 54	5.5	5.0	9.0
55 to 64	11.8	11.3	14.9
65 to 74	22.2	22.5	21.0
75 to 84	28.0	29.2	20.1
85 and over	21.6	23.0	12.1
Age Not Stated	0.0	0.0	0.1

NOTE: 0.0 Rounds to zero.

Chart 4.15***Age-Adjusted Injury and Poisoning Deaths***

The American Indian and Alaska Native age-adjusted death rate due to injury and poisoning (accidents, suicide, homicide, and other injuries) in 1989-1991 (120.3 deaths per 100,000 population) is about half of what it was in 1972-1974 (241.7).

However, the rate is over twice the U.S. All Races rate of 55.1 for 1990.

**Table 4.15*****Deaths and Mortality Rates due to Injury and Poisoning¹***

American Indians and Alaska Natives, IHS Service Area and U.S. All Races and White Populations, 1955-1991

Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White	Ratio Indian to:	
	Number	Rate	Number	Rate	Rate	U.S. All Races	U.S. White
(1991)	1,397						
1989-1991 (1990)	1,349	120.3	150,211	55.1	50.8	2.2	2.4
1988-1990 (1989)	1,367	123.6	150,869	55.6	50.9	2.2	2.4
1987-1989 (1988)	1,391	128.7	152,572	56.7	52.7	2.3	2.4
1986-1988 (1987)	1,390	132.4	149,942	56.2	52.8	2.4	2.5
1985-1987 (1986)	1,375	132.5	151,032	57.4	54.1	2.3	2.4
1984-1986 (1985)	1,275	132.5	145,648	55.8	53.0	2.4	2.5
1983-1985 (1984)	1,254	136.1	145,012	56.3	53.7	2.4	2.5
1982-1984 (1983)	1,280	146.9	144,091	56.6	53.6	2.6	2.7
1981-1983 (1982)	1,351	156.6	147,894	59.2	55.9	2.6	2.8
1980-1982 (1981)	1,344	168.3	155,576	63.2	59.5	2.7	2.8
1979-1981 (1980)	1,418	179.2	160,551	66.1	61.9	2.7	2.9
1978-1980 (1979)	1,472	188.4	158,945	66.4	62.1	2.8	3.0
1977-1979 (1978)	1,383	193.3	157,450	66.7	62.6	2.9	3.1
1976-1978 (1977)	1,346	197.6	156,308	67.3	62.8	2.9	3.1
1975-1977 (1976)	1,321	203.4	151,913	66.2	63.8	3.1	3.2
1974-1976 (1975)	1,283	210.4	156,263	69.5	63.8	3.0	3.3
1973-1975 (1974)	1,229	227.3	156,931	70.8	64.6	3.2	3.5
1972-1974 (1973)	1,381	241.7	166,454	76.1	69.4	3.2	3.5
(1972)	1,241						
1954-1956 (1955)	2,273	200.3	117,650	69.2	51.9	2.9	3.9

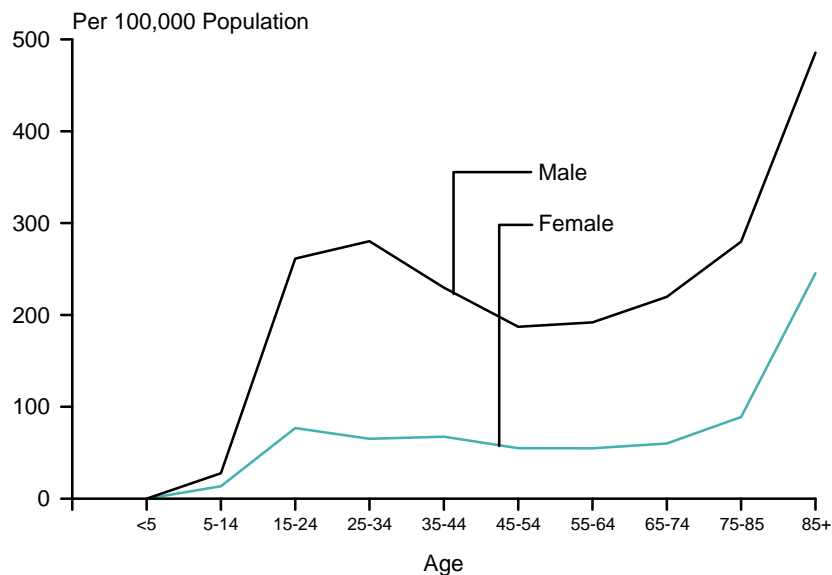
NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single years specified.

¹ Includes the following deaths and ICD-9 codes; Motor vehicle accidents-E810-E825, Other accidents - E800-E807, E826-E949, Suicide - E950-E959, Homicide and legal intervention - E960-E978, Injury undetermined whether accidentally or purposely inflicted - E980-E989 and Injury resulting from operations of war - E990-E999.

Chart 4.16

***Injury and Poisoning
Death Rates by Age and
Sex, Indians and Alaska
Natives (1989-91)***

The age-specific death rate due to injury and poisoning for Indian males (1989-1991) was higher for all age groups in comparison with Indian females. The Indian male rate was over 200 deaths per 100,000 population for age groups 15 through 44 and 65 and over.

**Table 4.16**

***Injury and Poisoning¹
Mortality Rates by Age
and Sex***

American Indians and Alaska Natives, IHS Service Area, 1989-1991, and U.S. All Races and White Populations, 1990

Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5-14 years	20.7	27.6	13.5
15-24 years	170.8	261.3	76.8
25-34 years	170.3	280.2	65.2
35-44 years	145.9	229.7	67.5
45-54 years	118.1	187.1	54.9
55-64 years	118.5	191.8	54.8
65-74 years	130.6	219.7	60.0
75-84 years	165.7	279.7	88.9
85 years+	333.5	485.4	245.3

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 5 years	29.0	33.3	24.5
5-14 years	12.8	16.4	8.9
15-24 years	78.2	123.0	31.6
25-34 years	71.7	113.9	29.7
35-44 years	60.2	94.4	26.8
45-54 years	53.1	80.8	26.8
55-64 years	56.4	85.2	30.7
65-74 years	69.2	104.0	42.1
75-84 years	130.6	197.5	90.7
85 years+	285.5	424.9	231.7

Age Group	U.S. White		
	Both Sexes	Male	Female
Under 5 years	19.3	22.3	15.9
5-14 years	11.7	15.0	8.1
15-24 years	71.3	109.4	31.0
25-34 years	63.8	100.2	26.7
35-44 years	55.1	84.9	25.2
45-54 years	50.3	75.1	26.1
55-64 years	54.3	81.0	30.0
65-74 years	67.5	101.0	41.1
75-84 years	130.3	197.4	90.2
85 years+	287.8	430.8	233.5

¹ Includes deaths with ICD-9 codes E800.0-E999.9.

NOTE: — Represents zero.

Chart 4.17
Age-Adjusted Accident
Death Rates

The age-adjusted accident death rate for American Indians and Alaska Natives dropped from 188.0 in 1972-1974 to 86.0 in 1989-1991, a decrease of 54 percent. However, the rate is over 2.6 times the U.S. All Races rate of 32.5 for 1990.

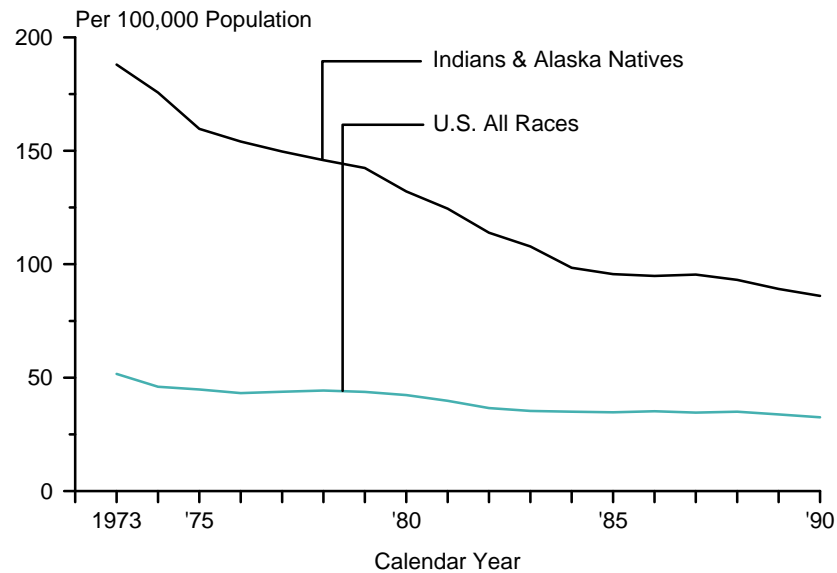


Table 4.17
Accident Deaths and Mortality Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1991

Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native				U.S. All Races			U.S. White		
	Total Deaths	All Accidents	Motor Vehicle	Other	All Accidents	Motor Vehicle	Other	All Accidents	Motor Vehicle	Other
(1991)	988									
1989-1991 (1990)	970	86.0	48.4	37.6	32.5	18.5	14.0	31.8	18.6	13.0
1988-1990 (1989)	969	89.1	49.6	39.5	33.8	18.9	14.9	32.9	19.1	13.8
1987-1989 (1988)	1,012	93.1	52.2	41.0	35.0	19.7	15.3	34.1	20.0	14.1
1986-1988 (1987)	1,000	95.4	54.3	41.1	34.6	19.5	15.2	33.9	19.8	14.0
1985-1987 (1986)	983	94.8	54.2	40.7	35.2	19.4	15.7	34.5	19.8	14.7
1984-1986 (1985)	912	95.6	53.0	42.7	34.7	18.8	16.0	34.1	19.1	15.0
1983-1985 (1984)	920	98.4	53.2	45.2	35.0	19.1	15.9	34.6	19.6	15.0
1982-1984 (1983)	905	107.8	57.0	50.8	35.3	18.5	16.8	34.7	19.0	15.7
1981-1983 (1982)	999	113.9	62.1	51.9	36.6	19.3	17.3	36.1	19.8	16.3
1980-1982 (1981)	972	124.5	69.4	55.1	39.8	21.8	18.0	39.3	22.5	16.8
1979-1981 (1980)	1,058	132.1	75.2	56.8	42.3	22.9	19.5	41.5	23.4	18.0
1978-1980 (1979)	1,095	142.4	80.4	62.0	43.7	23.7	20.0	42.9	24.3	18.6
1977-1979 (1978)	1,070	145.9	82.4	63.5	44.3	23.4	20.9	43.3	23.8	19.5
1976-1978 (1977)	1,004	149.7	85.0	64.8	43.8	22.4	21.4	42.5	22.5	20.0
1975-1977 (1976)	994	154.1	86.9	67.2	43.2	21.5	21.7	41.8	21.5	20.3
1974-1976 (1975)	999	159.7	87.8	72.0	44.8	21.3	23.5	43.1	21.2	21.9
1973-1975 (1974)	921	175.7	97.3	78.4	46.0	21.8	24.2	44.3	21.7	22.6
1972-1974 (1973)	1,089	188.0	104.8	83.3	51.7	26.4	25.3	49.5	26.0	23.5
(1972)	987									
1954-1956 (1955)	714	184.0	97.6	90.3	54.3	24.6	29.7	52.2	24.3	27.9

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

Chart 4.18
Accident Death Rates by Age and Sex, Indians and Alaska Natives (1989-1991)

The age-specific death rate for accidents for Indian males (1989-1991) was higher for all age groups in comparison with Indian females. The Indian male rate was over 3 times the Indian female rate for age groups 25 through 84.

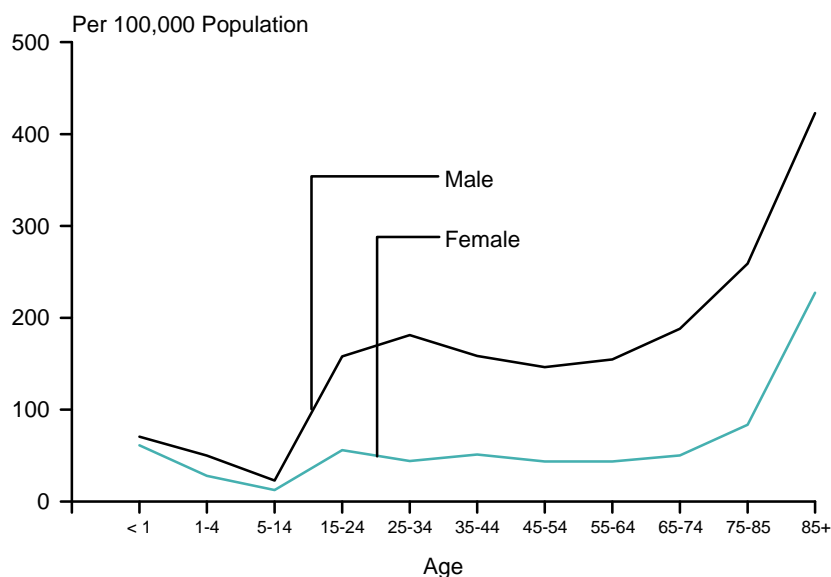


Table 4.18
Accident¹ Mortality Rates by Age and Sex

American Indians and Alaska Natives, IHS Service Area, 1989-1991, and U.S. All Races and White Populations, 1990

Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 1year	65.9	70.5	61.2
1-4 years	39.1	49.9	27.9
5-14 years	17.8	22.9	12.5
15-24 years	107.9	158.0	55.9
25-34 years	111.1	181.2	44.1
35-44 years	102.9	158.4	51.1
45-54 years	92.6	146.2	43.5
55-64 years	95.2	154.7	43.5
65-74 years	111.2	188.0	50.2
75-84 years	154.5	259.7	83.5
85 years+	299.0	422.7	227.2

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 1year	23.6	25.2	21.8
1-4 years	17.3	20.8	13.7
5-14 years	10.4	13.5	7.2
15-24 years	43.9	65.9	20.8
25-34 years	37.0	57.9	16.1
35-44 years	31.3	48.7	14.3
45-54 years	29.4	43.7	15.8
55-64 years	34.3	49.8	20.4
65-74 years	46.6	64.6	32.5
75-84 years	100.3	134.0	80.2
85 years+	257.1	349.8	221.3

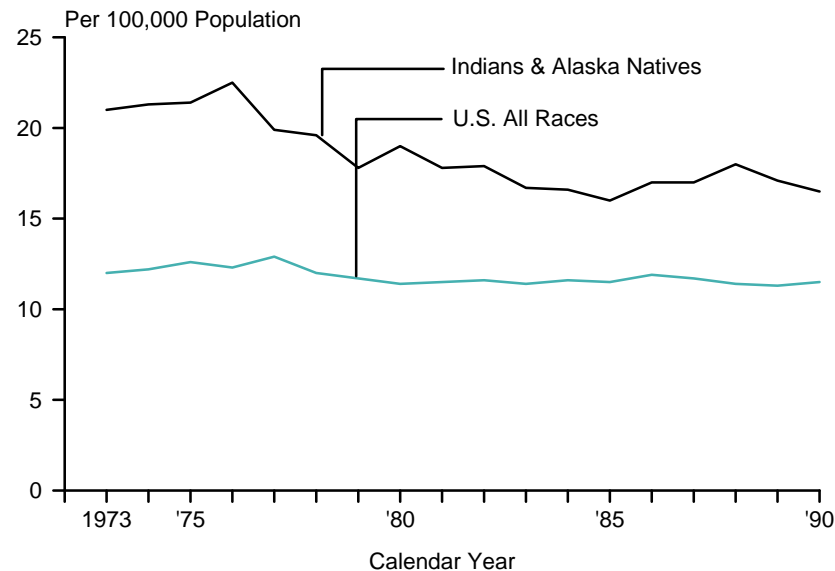
Age Group	U.S. White		
	Both Sexes	Male	Female
Under 1year	19.5	20.8	13.1
1-4 years	15.7	18.9	12.4
5-14 years	9.8	12.6	6.8
15-24 years	46.1	68.7	22.3
25-34 years	36.4	56.7	15.7
35-44 years	29.6	45.5	13.7
45-54 years	27.6	40.5	15.2
55-64 years	32.4	46.5	17.5
65-74 years	44.7	61.4	31.6
75-84 years	99.3	132.3	79.9
85 years+	259.9	353.1	224.5

¹ Includes deaths with ICD-9 codes E800-E949.

Chart 4.19
Age-Adjusted Suicide
Death Rates

The age-adjusted suicide death rate for American Indians and Alaska Natives has decreased 21 percent since 1972-1974. The Indian rate for 1989-1991 was 16.5 deaths per 100,000 population compared with the U.S. All Races rate of 11.5 for 1990, a ratio of 1.4.

Table 4.19
Suicide Deaths and
Mortality Rates



American Indians and
Alaska Natives, IHS Service
Area, and U.S. All Races
and White Populations,
1955-1991

Age-Adjusted Rate per 100,000
Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1991)	184						
1989-1991 (1990)	195	16.5	30,906	11.5	12.2	1.4	1.4
1988-1990 (1989)	192	17.1	30,232	11.3	12.0	1.5	1.4
1987-1989 (1988)	185	17.5	30,407	11.4	12.2	1.5	1.4
1986-1988 (1987)	187	17.0	30,796	11.7	12.5	1.5	1.4
1985-1987 (1986)	158	17.0	30,904	11.9	12.7	1.4	1.3
1984-1986 (1985)	172	16.0	29,453	11.5	12.3	1.4	1.3
1983-1985 (1984)	148	16.6	29,286	11.6	12.4	1.4	1.3
1982-1984 (1983)	161	16.7	28,295	11.4	12.2	1.5	1.4
1981-1983 (1982)	154	17.9	28,242	11.6	12.4	1.5	1.4
1980-1982 (1981)	157	17.8	27,596	11.5	12.2	1.5	1.5
1979-1981 (1980)	146	19.0	26,869	11.4	12.1	1.7	1.6
1978-1980 (1979)	162	17.8	27,204	11.7	12.4	1.5	1.4
1977-1979 (1978)	117	19.6	27,294	12.0	12.7	1.6	1.5
1976-1978 (1977)	161	19.9	28,681	12.9	13.6	1.5	1.5
1975-1977 (1976)	143	22.5	26,832	12.3	12.9	1.8	1.7
1974-1976 (1975)	139	21.4	27,063	12.6	13.3	1.7	1.6
1973-1975 (1974)	122	21.3	25,683	12.2	12.8	1.7	1.7
1972-1974 (1973)	116	21.0	25,118	12.0	12.6	1.8	1.7
(1972)	113		25,004				
1954-1956 (1955)	39	11.9	16,760	9.9	10.4	1.2	1.1

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

Chart 4.20
Suicide Death Rates by Age and Sex, Indians and Alaska Natives (1989–1991)

The age-specific suicide death rate (1989–1991) for Indian males was higher for all age groups in comparison with Indian females. The Indian male rate was at its highest (over 52.0 deaths per 100,000 population) for age groups 15 through 34.

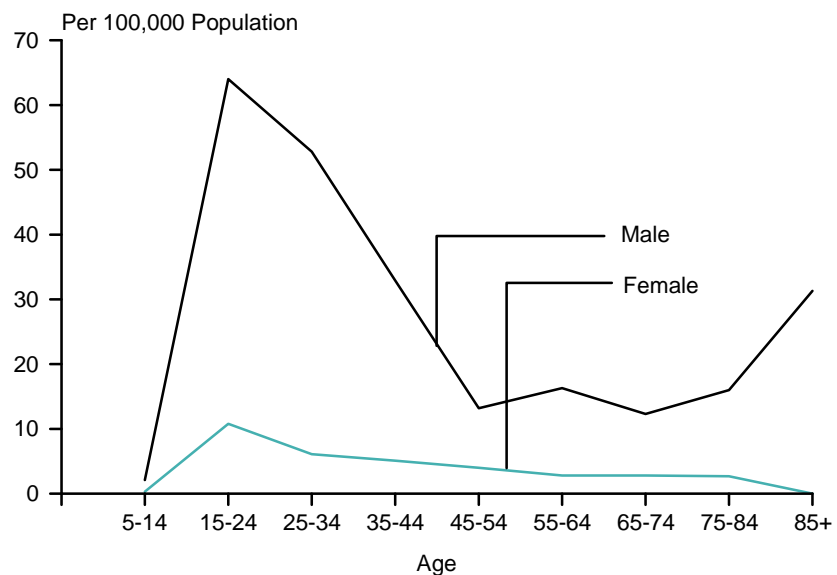


Table 4.20
Suicide¹ Mortality Rates by Age and Sex

American Indians and Alaska Natives, IHS Service Area, 1989–1991, and U.S. All Races and White Populations, 1990

Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5–14 years	1.3	2.3	0.3
15–24 years	37.5	63.3	10.8
25–34 years	28.9	52.8	6.1
35–44 years	18.5	32.9	5.1
45–54 years	8.4	13.2	4.0
55–64 years	9.1	16.3	2.8
65–74 years	7.0	12.3	2.8
75–84 years	8.0	16.0	2.7
85 years+	11.5	31.3	—

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5–14 years	0.8	1.0	0.4
15–24 years	13.2	22.0	3.9
25–34 years	15.2	24.8	5.6
35–44 years	15.3	23.9	6.8
45–54 years	14.8	23.2	6.9
55–64 years	16.0	25.7	7.4
65–74 years	17.9	32.2	6.7
75–84 years	24.9	56.1	6.3
85 years+	22.2	65.9	5.4

Age Group	U.S. White		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5–14 years	0.8	1.1	0.4
15–24 years	14.0	23.2	4.1
25–34 years	15.9	25.6	5.9
35–44 years	16.4	25.3	7.4
45–54 years	16.0	24.7	7.4
55–64 years	17.3	27.5	7.9
65–74 years	19.1	34.2	7.1
75–84 years	26.7	60.2	6.7
85 years+	23.3	70.4	5.3

¹ Includes deaths with ICD-9 codes E950–E959.

NOTE: — Represents zero

Chart 4.21
Age-Adjusted Homicide
Death Rates

The age-adjusted homicide death rate for American Indians and Alaska Natives has decreased 37 percent since 1972-1974. In 1989-1991, the Indian rate was 15.3 deaths per 100,000 population compared with 10.2 for the U.S. All Races population in 1990, a ratio of 1.5 to 1.

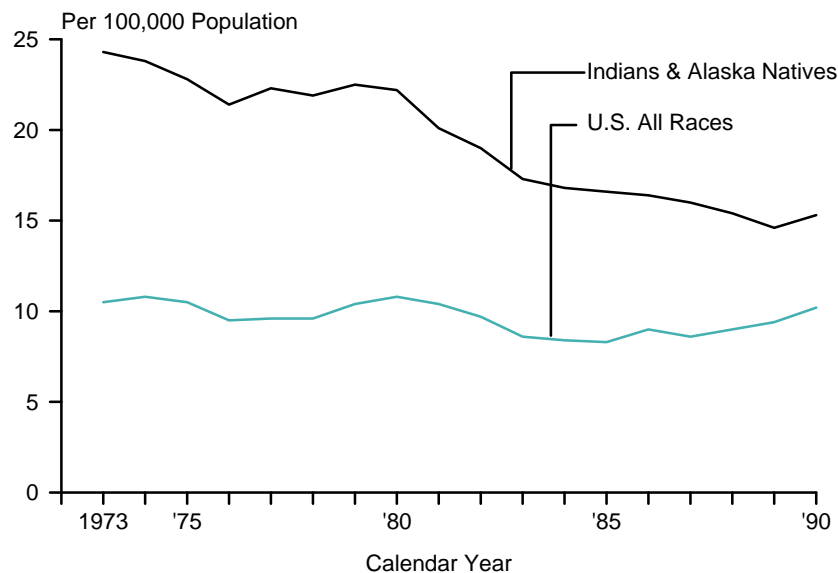


Table 4.21
Homicide Deaths and
Mortality Rates

American Indians and
Alaska Natives, IHS Service
Area, and U.S. All Races
and White Populations,
1955-1991

Age-Adjusted Rate per 100,000
Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1991)	199						
1989-1991 (1990)	153	15.3	24,932	10.2	5.9	1.5	2.6
1988-1990 (1989)	177	14.6	22,909	9.4	5.4	1.6	2.7
1987-1989 (1988)	160	15.4	22,032	9.0	5.3	1.7	2.9
1986-1988 (1987)	161	16.0	21,103	8.6	5.3	1.9	3.0
1985-1987 (1986)	184	16.4	21,731	9.0	5.6	1.8	2.9
1984-1986 (1985)	151	16.4	19,893	8.3	5.4	2.0	3.0
1983-1985 (1984)	146	16.8	19,796	8.4	5.5	2.0	3.1
1982-1984 (1983)	171	17.3	20,191	8.6	5.6	2.0	3.1
1981-1983 (1982)	145	19.0	22,358	9.7	6.3	2.0	3.0
1980-1982 (1981)	165	20.1	23,646	10.4	6.6	1.9	3.0
1979-1981 (1980)	172	22.2	24,278	10.8	6.9	2.1	3.2
1978-1980 (1979)	164	22.5	22,550	10.4	6.5	2.2	3.5
1977-1979 (1978)	158	21.9	20,432	9.6	6.0	2.3	3.7
1976-1978 (1977)	139	22.3	19,968	9.6	5.9	2.3	3.8
1975-1977 (1976)	144	21.4	19,554	9.5	5.5	2.3	3.9
1974-1976 (1975)	115	22.8	21,310	10.5	6.1	2.2	3.7
1973-1975 (1974)	136	23.8	21,465	10.8	6.0	2.2	4.0
1972-1974 (1973)	139	24.3	20,465	10.5	5.7	2.3	4.3
(1972)	93		19,638				
1954-1956 (1955)	77	23.8	7,418	4.8	2.4	5.0	9.9

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

Chart 4.22
Homicide Death Rates by
Age and Sex, Indians and
Alaska Natives
(1989–1991)

The age-specific homicide death rate (1989-1991) for Indian males was higher for all age groups except under 1 and 75 to 84 in comparison with Indian females. The Indian male rate exceeded 34.0 deaths per 100,000 population for age groups 15 through 44.

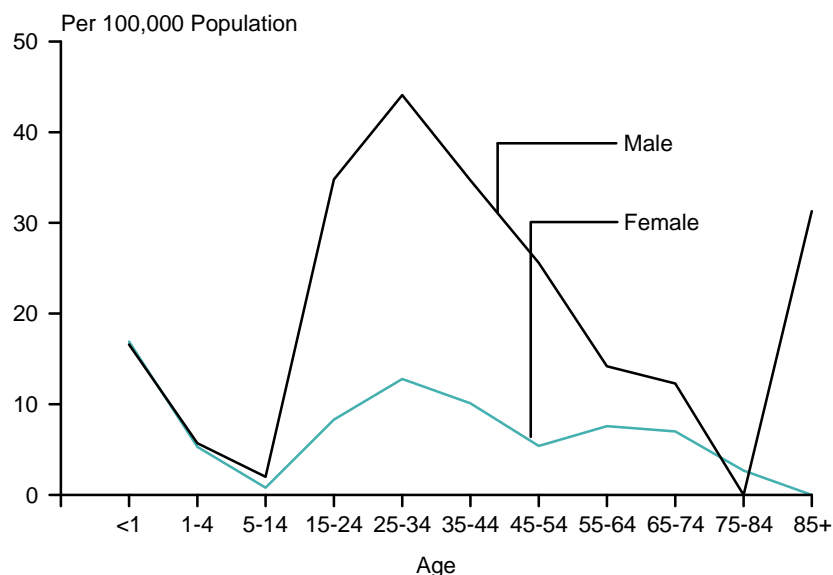


Table 4.22
Homicide¹ Mortality
Rates by Age and Sex

American Indians and
 Alaska Natives, IHS Service
 Area, 1989–1991, and U.S.
 All Races and White
 Populations, 1990

Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 1 year	16.7	16.6	16.9
1–4 years	5.5	5.7	5.3
5–14 years	1.4	2.0	0.8
15–24 years	21.8	34.8	8.3
25–34 years	26.6	44.1	12.8
35–44 years	22.0	34.7	10.1
45–54 years	15.0	25.6	5.4
55–64 years	10.6	14.2	7.6
65–74 years	9.3	12.3	7.0
75–84 years	1.6	—	2.7
85 years+	11.5	31.3	—

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 1 year	8.4	8.8	8.0
1–4 years	2.6	2.7	2.4
5–14 years	1.5	1.6	1.2
15–24 years	19.9	33.0	6.3
25–34 years	17.7	28.3	7.2
35–44 years	11.8	19.0	4.8
45–54 years	7.6	12.1	3.2
55–64 years	5.0	8.0	2.3
65–74 years	3.8	5.7	2.2
75–84 years	4.3	5.7	3.4
85 years+	4.6	6.7	3.8

Age Group	U.S. White		
	Both Sexes	Male	Female
Under 1 year	5.8	6.4	5.1
1–4 years	1.6	1.7	1.4
5–14 years	1.0	1.0	0.8
15–24 years	10.0	15.6	4.0
25–34 years	9.8	15.2	4.3
35–44 years	7.4	11.4	3.2
45–54 years	5.4	8.3	2.6
55–64 years	3.6	5.5	1.8
65–74 years	2.8	4.1	1.8
75–84 years	3.2	3.8	2.7
85 years+	3.2	4.8	2.5

¹ Includes deaths with ICD-9 codes E960–E978.

NOTE: — Represents zero.

Chart 4.23
Other Injury Deaths and Mortality Rates

The age-adjusted death rate due to other injuries (undetermined injury and war injury) has decreased 70 percent since 1972-1974. In 1989-1991, the Indian rate was 2.5 deaths per 100,000 population compared with 0.9 for the U.S. All Races population in 1990, nearly 3 times as great.

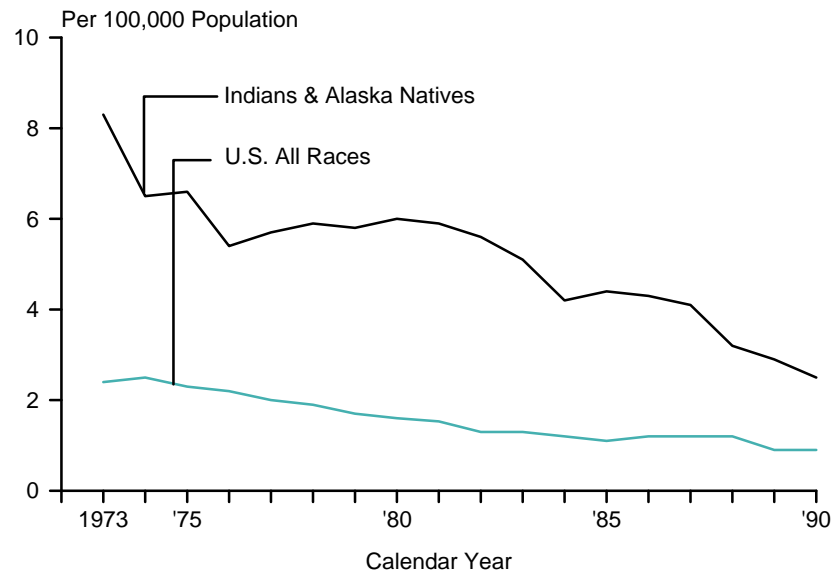


Table 4.23
Deaths and Mortality Rates due to Other Injuries ^{1 2}

American Indians and Alaska Natives, IHS Service Area and U.S. All Races and White Populations, 1972-1991

Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races			U.S. White Combined Rate	Ratio Indian to:	
	Number of Deaths		Number of Deaths				U.S. All Races	U.S. White
	Undetermined	Combined Rate	Undetermined	War	Combined			
	Injury and War Injury		Injury	Injury				
(1991)	26							
1989–1991 (1990)	31	2.5	2,376	14	0.9	0.8	2.8	3.1
1988–1990 (1989)	28	2.9	2,686	14	0.9	0.8	3.2	3.6
1987–1989 (1988)	34	3.2	3,018	15	1.2	1.0	2.7	3.2
1986–1988 (1987)	41	4.1	3,011	12	1.2	1.0	3.4	4.1
1985–1987 (1986)	50	4.3	3,108	12	1.2	1.1	3.6	3.9
1984–1986 (1985)	39	4.4	2,826	19	1.1	1.0	4.0	4.4
1983–1985 (1984)	39	4.2	2,996	23	1.2	1.1	3.5	3.8
1982–1984 (1983)	40	5.1	3,104	13	1.3	1.1	3.9	4.6
1981–1983 (1982)	52	5.6	3,201	11	1.3	1.2	4.3	4.7
1980–1982 (1981)	46	5.9	3,614	16	1.5	1.3	3.9	4.5
1979–1981 (1980)	39	6.0	3,663	23	1.6	1.4	3.8	4.3
1978–1980 (1979)	49	5.8	3,860	17	1.7	1.5	2.4	2.7
1977–1979 (1978)	37	5.9	4,144	19	1.9	1.6	3.1	3.7
1976–1978 (1977)	38	5.7	4,433	24	2.0	1.6	2.9	3.6
1975–1977 (1976)	39	5.4	4,744	22	2.2	1.8	2.5	2.2
1974–1976 (1975)	29	6.6	4,838	22	2.3	1.9	2.9	3.5
1973–1975 (1974)	50	6.5	5,149	12	2.5	2.1	2.6	3.1
1972–1974 (1973)	35 ³	8.3	5,030	20	2.4	2.0	3.5	4.2
(1972)	46							

NOTE: Data were first available for these cause of death categories in 1969, through use of the ICD-8 coding system. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

¹ Includes deaths with ICD-9 codes E980-E989; Injury undetermined whether accidentally or purposely inflicted.

² Includes deaths with ICD-9 codes E990-E999; Injury resulting from operations of war.

³ In 1973 there was one American Indian injury death resulting from operations of war. For each of the other years shown above there were no American Indian injury deaths due to this cause.

Chart 4.24
Other Injury Death Rates
by Age and Sex, Indians
and Alaska Natives
(1989-1991)

The age-specific death rate due to other injuries (1989-1991) for Indian males was higher for all age groups through age 84 in comparison with Indian females. Indian females over 84 years old, however, had the highest age-specific rate, 18.2.

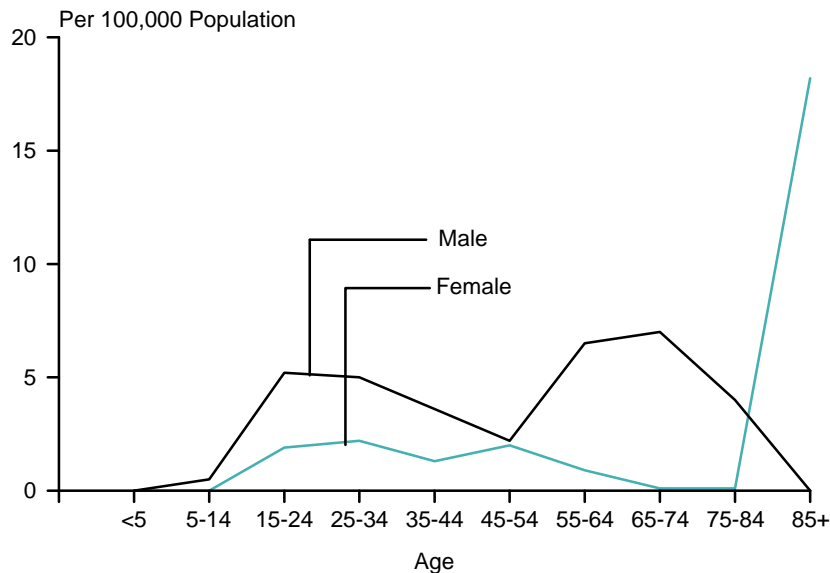


Table 4.24
Other Injury ¹ Mortality
Rates by Age and Sex

American Indians and
 Alaska Natives, IHS Service
 Area, 1989-1991, and U.S.
 All Races and White
 Populations, 1990

Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5-14 years	0.3	0.5	—
15-24 years	3.6	5.2	1.9
25-34 years	3.6	5.0	2.2
35-44 years	2.4	3.6	1.3
45-54 years	2.1	2.2	2.0
55-64 years	3.5	6.5	0.9
65-74 years	3.1	7.0	—
75-84 years	1.6	4.0	—
85 years+	11.5	—	18.2

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 5 years	0.4	0.5	0.4
5-14 years	0.1	0.2	0.1
15-24 years	0.8	1.3	0.3
25-34 years	1.5	2.3	0.7
35-44 years	1.5	2.3	0.8
45-54 years	1.0	1.3	0.7
55-64 years	0.8	1.2	0.5
65-74 years	0.7	1.0	0.4
75-84 years	0.8	1.3	0.5
85 years+	1.4	1.9	1.3

Age Group	U.S. White		
	Both Sexes	Male	Female
Under 5 years	0.2	0.2	0.1
5-14 years	0.1	0.2	0.0
15-24 years	0.8	1.1	0.3
25-34 years	1.4	2.1	0.5
35-44 years	1.4	2.1	0.7
45-54 years	1.0	1.1	0.7
55-64 years	0.7	1.0	0.4
65-74 years	0.7	0.9	0.4
75-84 years	0.8	1.3	0.4
85 years+	1.3	1.9	1.0

¹ Includes deaths with ICD-9 codes E980.0-E999.9.

NOTE: — Represents zero. 0.0 Rounds to zero.

Chart 4.25
Age-Adjusted Alcoholism
Death Rates

The age-adjusted alcoholism death rate for American Indians and Alaska Natives has decreased 36 percent since 1979-1981. In 1989-1991, it was 37.6 deaths per 100,000 population or 5.3 times the U.S. All Races rate of 7.1 in 1990.

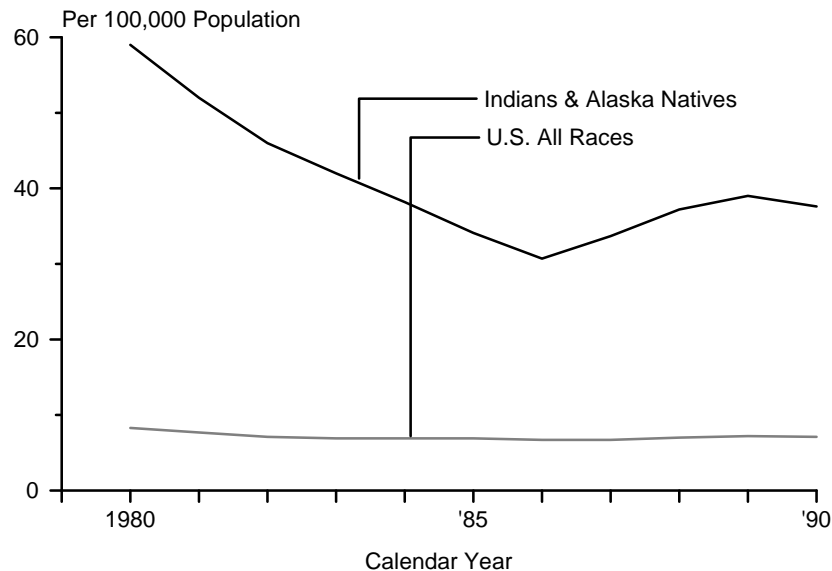


Table 4.25
Alcoholism Deaths and
Mortality Rates

American Indians and
Alaska Natives, IHS Service
Area, and U.S. All Races
and White Populations,
1979-1991

Age-Adjusted Rate per 100,000
Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio American Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1991)	360						
1989-1991 (1990)	345	37.6	19,592	7.1	6.1	5.3	6.2
1988-1990 (1989)	374	39.0	19,619	7.2	6.1	5.4	6.4
1987-1989 (1988)	372	37.2	18,715	7.0	5.9	5.3	6.3
1986-1988 (1987)	260	33.7	17,656	6.7	5.7	5.0	5.9
1985-1987 (1986)	260	30.7	17,283	6.7	5.6	4.6	5.5
1984-1986 (1985)	272	34.1	17,609	6.9	5.8	4.9	5.9
1983-1985 (1984)	300	38.2	17,452	6.9	5.9	5.5	6.5
1982-1984 (1983)	291	42.0	17,237	6.9	5.9	6.1	7.1
1981-1983 (1982)	286	46.0	17,334	7.1	6.1	6.5	7.5
1980-1982 (1981)	344	52.0	18,469	7.7	6.5	6.8	8.0
1979-1981 (1980)	368	59.0	19,560	8.3	6.9	7.1	8.6
(1979)	377						

NOTE: Includes causes of death previously classified as alcoholism deaths (alcoholic psychosis—291, alcohol dependence syndrome—303, and chronic liver disease and cirrhosis, specified as alcoholic, 571.0-571.3), plus deaths caused by alcohol abuse—305.0, alcoholic cardiomyopathy—425.5, alcoholic gastritis—535.3, excessive blood level of alcohol—790.3, and accidental poisoning by alcohol—E860.0 and E860.1. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

Chart 4.26
Alcoholism Death Rates
by Age and Sex, Indians
and Alaska Natives
(1989–1991)

The age-specific alcoholism death rate (1989–1991) for Indian males was higher for all age groups in comparison with Indian females. The Indian male rate exceeded 107.0 deaths per 100,000 population for age groups 45 through 74.

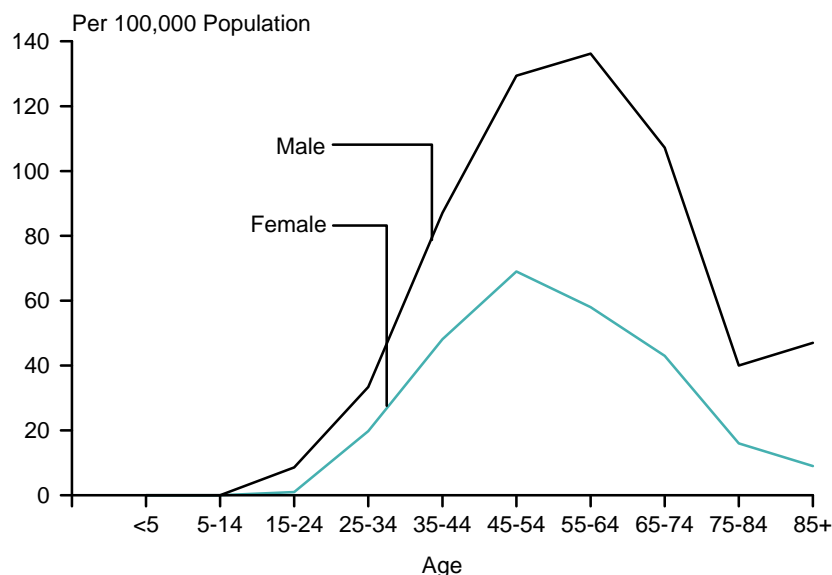


Table 4.26
Alcoholism¹ Mortality
Rates by Age and Sex

American Indians and
Alaska Natives, IHS Service
Area, 1989–1991, and U.S.
All Races and White
Populations, 1990

Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5–14 years	—	—	—
15–24 years	4.8	8.6	1.0
25–34 years	26.5	33.4	19.8
35–44 years	66.9	87.1	48.1
45–54 years	97.9	129.4	69.0
55–64 years	94.2	136.2	57.7
65–74 years	71.5	107.2	43.2
75–84 years	25.7	40.0	16.2
85 years+	23.0	47.0	9.1

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 5 years	0.0	0.0	—
5–14 years	0.0	0.0	0.0
15–24 years	0.3	0.5	0.1
25–34 years	2.8	3.9	1.7
35–44 years	10.2	15.6	5.0
45–54 years	17.8	28.0	8.1
55–64 years	23.7	38.3	10.7
65–74 years	20.0	33.5	9.6
75–84 years	11.2	22.0	4.7
85 years+	4.7	12.4	1.7

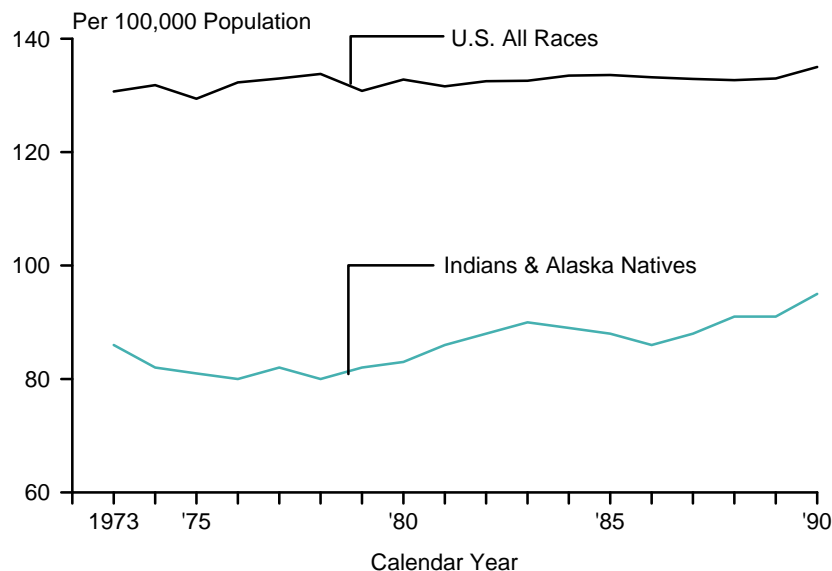
Age Group	U.S. White		
	Both Sexes	Male	Female
Under 5 years	0.0	0.0	—
5–14 years	0.0	0.0	0.0
15–24 years	0.3	0.5	0.0
25–34 years	2.2	3.1	1.2
35–44 years	8.2	12.8	3.5
45–54 years	14.6	22.9	6.4
55–64 years	21.4	34.4	9.4
65–74 years	19.0	31.4	9.1
75–84 years	10.9	21.5	4.5
85 years+	4.4	11.7	1.6

¹ Includes deaths with ICD-9 codes 291, 303, 305.0, 425.5, 535.3, 571.0–571.3, 790.3, and E860.0–E860.1.

NOTE: — Represents zero. 0.0 Rounds to zero.

Chart 4.27***Age-Adjusted Malignant Neoplasm Death Rates***

The age-adjusted malignant neoplasm death rate for American Indians and Alaska Natives hit a low in 1977-1979 of 80.2 deaths per 100,000 population, but has generally increased since then. In 1989-1991, the Indian rate was 70 percent of the U.S. All Races rate (1990), 94.5 compared with 135.0.

**Table 4.27*****Malignant Neoplasm Deaths and Mortality Rates***

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1991

Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1991)	1,021						
1989-1991 (1990)	859	94.5	505,322	135.0	131.5	0.7	0.7
1988-1990 (1989)	913	91.1	496,152	133.0	130.2	0.7	0.7
1987-1989 (1988)	831	90.9	485,048	132.7	130.0	0.7	0.7
1986-1988 (1987)	768	87.6	476,927	132.9	130.1	0.7	0.7
1985-1987 (1986)	756	85.8	469,376	133.2	130.4	0.6	0.7
1984-1986 (1985)	714	88.1	461,563	133.6	130.7	0.7	0.7
1983-1985 (1984)	712	88.8	453,492	133.5	130.2	0.7	0.7
1982-1984 (1983)	662	89.6	442,986	132.6	129.4	0.7	0.7
1981-1983 (1982)	617	87.5	433,795	132.5	129.4	0.7	0.7
1980-1982 (1981)	578	86.3	422,094	131.6	128.5	0.7	0.7
1979-1981 (1980)	567	82.7	416,509	132.8	129.6	0.6	0.6
1978-1980 (1979)	480	81.7	403,395	130.8	130.2	0.6	0.6
1977-1979 (1978)	503	80.2	396,992	133.8	130.8	0.6	0.6
1976-1978 (1977)	456	82.4	386,686	133.0	130.0	0.6	0.6
1975-1977 (1976)	441	80.3	377,312	132.3	129.5	0.6	0.6
1974-1976 (1975)	395	81.4	365,693	129.4	128.1	0.6	0.6
1973-1975 (1974)	403	82.2	360,472	131.8	129.0	0.6	0.6
1972-1974 (1973)	385	85.6	351,055	130.7	127.7	0.7	0.7
(1972)	354		345,618				
1954-1956 (1955)	296	95.0	240,681	125.8	125.8	0.8	0.8

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

Chart 4.28
Malignant Neoplasm
Death Rates by Age and
Sex, Indians and Alaska
Natives (1989-91)

The age-specific malignant neoplasm death rate (1989-1991) for Indian males was greater for age groups 5 through 34 and 55 and over, in comparison with Indian females. The rates for Indian males and females increased with age beginning with age 5.

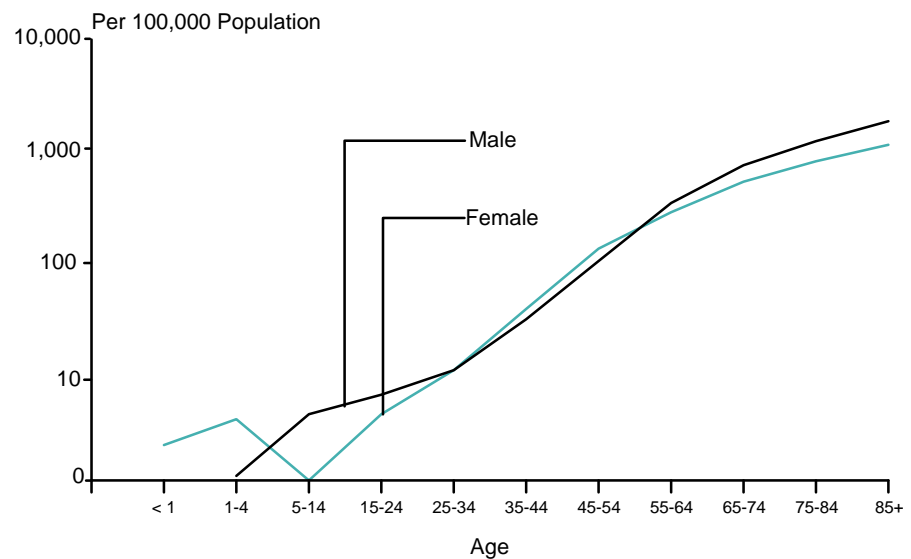


Table 4.28
Malignant Neoplasm¹
Mortality Rates by Age
and Sex

American Indians and
 Alaska Natives, IHS Service
 Area, 1989-1991, and U.S.
 All Races and White
 Populations, 1990

Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 1	1.0	—	2.1
1-4 years	2.3	1.1	3.6
5-14 years	2.3	3.5	1.0
15-24 years	4.8	5.5	4.1
25-34 years	10.1	10.4	9.9
35-44 years	32.9	29.3	36.3
45-54 years	112.9	97.9	126.6
55-64 years	298.2	329.1	271.3
65-74 years	606.5	724.0	513.2
75-84 years	952.4	1,198.7	786.5
85 years+	1,368.4	1,816.2	1,108.6

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 1	2.3	2.4	2.2
1-4 years	3.5	3.7	3.2
5-14 years	3.1	3.5	2.8
15-24 years	4.9	5.7	4.1
25-34 years	12.6	12.6	12.6
35-44 years	43.3	38.5	48.2
45-54 years	158.9	162.7	155.7
55-64 years	449.6	533.4	375.6
65-74 years	872.3	1,123.1	677.8
75-84 years	1,348.5	1,915.6	1,010.9
85 years+	1,752.9	2,740.7	1,372.3

Age Group	U.S. White		
	Both Sexes	Male	Female
Under 1	2.2	2.3	2.1
1-4 years	3.5	3.7	3.2
5-14 years	3.2	3.5	2.8
15-24 years	5.0	5.7	4.0
25-34 years	12.1	12.3	11.8
35-44 years	41.1	35.8	46.3
45-54 years	150.6	150.0	151.1
55-64 years	435.4	508.7	368.8
65-74 years	858.7	1,091.4	675.4
75-84 years	1,338.4	1,884.3	1,012.3
85 years+	1,742.3	2,716.0	1,372.5

¹ Includes deaths with ICD-9 codes 140-208.

NOTE: — Represents zero.

Chart 4.29
Age-Adjusted
Tuberculosis Death Rates

The age-adjusted tuberculosis death rate for American Indians and Alaska Natives has dropped from 10.5 deaths per 100,000 population in 1972-1974 to 2.7 in 1989-1991, a decrease of 74 percent. The Indian rate is still 5.4 times the U.S. All Races rate of 0.5 for 1990.

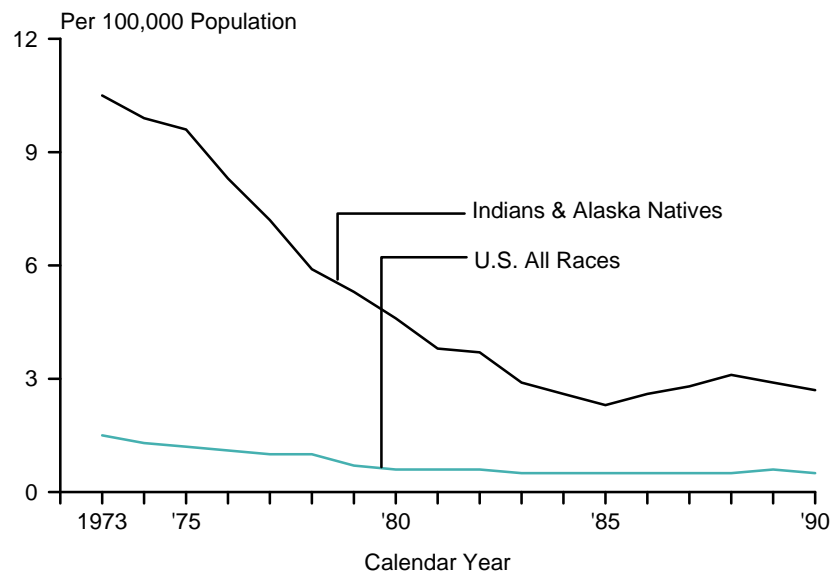


Table 4.29
Tuberculosis Deaths and
Mortality Rates

American Indians and
Alaska Natives, IHS Service
Area, and U.S. All Races
and White Populations,
1955-1991

Age-Adjusted Rate per 100,000
Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1991)	25						
1989-1991 (1990)	24	2.7	1,810	0.5	0.3	5.4	9.0
1988-1990 (1989)	33	2.9	1,970	0.6	0.3	4.8	9.7
1987-1989 (1988)	25	3.1	1,921	0.5	0.3	6.2	10.3
1986-1988 (1987)	28	2.8	1,755	0.5	0.3	5.6	9.3
1985-1987 (1986)	24	2.6	1,782	0.5	0.3	5.2	8.7
1984-1986 (1985)	18	2.3	1,752	0.5	0.3	4.6	7.7
1983-1985 (1984)	17	2.6	1,729	0.5	0.3	5.2	8.7
1982-1984 (1983)	30	2.9	1,779	0.5	0.3	5.8	9.7
1981-1983 (1982)	22	3.7	1,807	0.6	0.4	6.2	9.3
1980-1982 (1981)	30	3.8	1,937	0.6	0.4	6.3	9.5
1979-1981 (1980)	31	4.6	1,978	0.6	0.4	7.7	11.5
1978-1980 (1979)	33	5.3	2,007	0.7	0.4	7.6	13.3
1977-1979 (1978)	40	5.9	2,914	1.0	0.7	5.9	8.4
1976-1978 (1977)	33	7.2	2,968	1.0	0.7	7.2	10.3
1975-1977 (1976)	48	8.3	3,130	1.1	0.8	7.5	10.4
1974-1976 (1975)	53	9.6	3,333	1.2	0.9	8.0	12.0
1973-1975 (1974)	48	9.9	3,513	1.3	0.9	7.6	11.0
1972-1974 (1973)	45	10.5	3,875	1.5	1.1	7.0	9.5
(1972)	50		4,376				
1954-1956 (1955)	253	57.9	14,940	8.4	6.2	6.9	9.3

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

Chart 4.30
Age-Adjusted Diabetes Mellitus Death Rates

The age-adjusted diabetes mellitus death rate for American Indians and Alaska Natives is slightly higher today than it was in 1972-1974 when it was 28.1 deaths per 100,000 population. In 1989-1991, the Indian rate of 29.7 was 2.5 times the U.S. All Races rate of 11.7 in 1990.

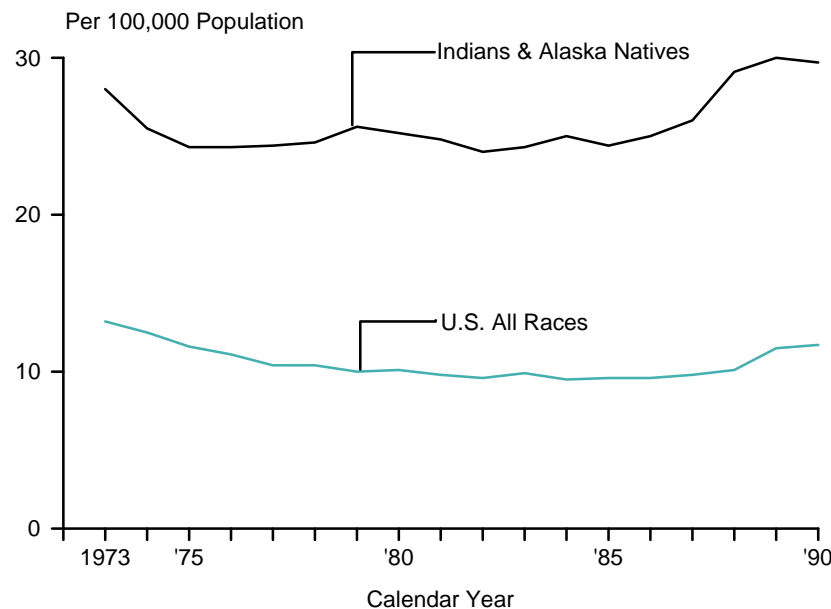


Table 4.30
Diabetes Mellitus Deaths and Mortality Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1991

Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1991)	275						
1989-1991 (1990)	285	29.7	47,664	11.7	10.4	2.5	2.9
1988-1990 (1989)	301	30.0	46,833	11.5	10.3	2.6	2.9
1987-1989 (1988)	260	29.1	40,368	10.1	9.0	2.9	3.2
1986-1988 (1987)	227	26.0	38,532	9.8	8.7	2.7	3.0
1985-1987 (1986)	195	25.0	37,184	9.6	8.5	2.6	2.9
1984-1986 (1985)	208	24.4	36,969	9.6	8.6	2.5	2.8
1983-1985 (1984)	189	25.0	35,787	9.5	8.5	2.6	2.9
1982-1984 (1983)	179	24.3	36,246	9.9	8.9	2.5	2.7
1981-1983 (1982)	164	24.0	34,583	9.6	8.7	2.5	2.8
1980-1982 (1981)	156	24.8	34,642	9.8	8.8	2.5	2.8
1979-1981 (1980)	173	25.2	34,851	10.1	9.1	2.5	2.8
1978-1980 (1979)	153	25.6	33,192	10.0	9.0	2.6	2.8
1977-1979 (1978)	147	24.6	33,841	10.4	9.4	2.4	2.6
1976-1978 (1977)	133	24.4	32,989	10.4	9.4	2.3	2.6
1975-1977 (1976)	125	24.3	34,508	11.1	10.0	2.2	2.4
1974-1976 (1975)	123	24.3	35,230	11.6	10.4	2.1	2.3
1973-1975 (1974)	110	25.5	37,329	12.5	11.4	2.0	2.2
1972-1974 (1973)	117	28.1	38,208	13.2	11.8	2.1	2.4
(1972)	129		38,674				
1954-1956 (1955)	64	17.0	25,488	13.0	12.6	1.3	1.3

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Number of deaths and U.S. rates are for the single year specified.

Chart 4.31
Age-Adjusted
Gastrointestinal Disease
Death Rates

The age-adjusted gastrointestinal disease death rate for American Indians and Alaska Natives has decreased 81 percent since the 1972-1974 rate of 6.2 deaths per 100,000 population. In 1989-1991, the Indian rate (1.2) was essentially the same as the 1990 U.S. All Races rate (1.3).

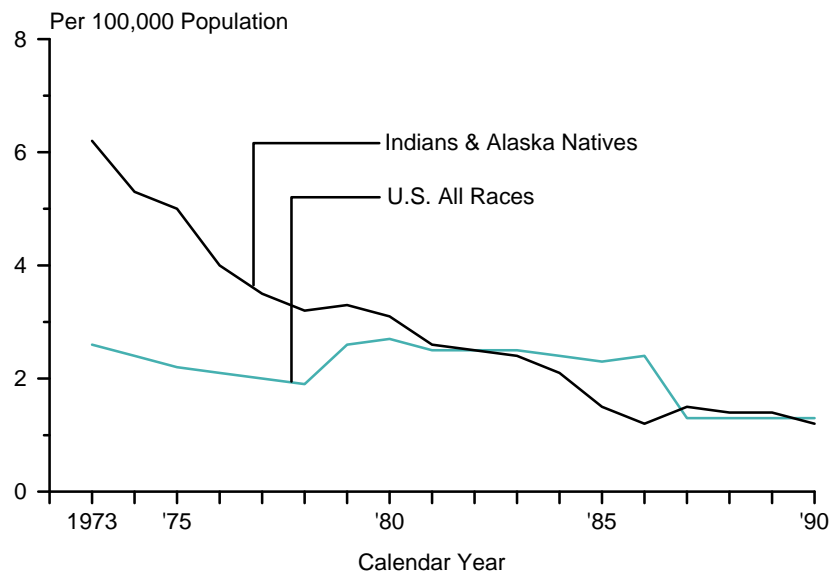


Table 4.31
Gastrointestinal Disease
Deaths and Mortality
Rates

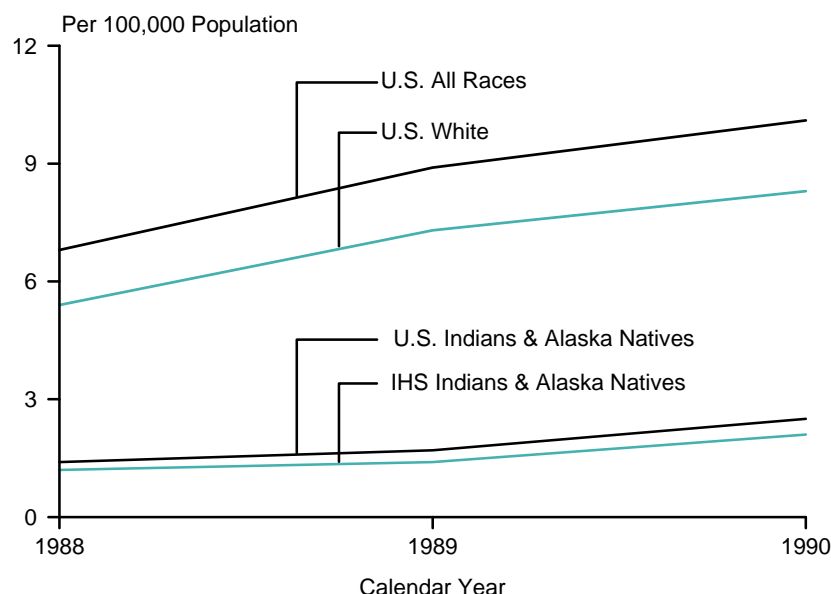
American Indians and
Alaska Natives, IHS Service
Area, and U.S. All Races
and White Populations,
1955-1991
Age-Adjusted Rate per 100,000
Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1991)	18						
1989-1991 (1990)	17	1.2	6,007	1.3	1.2	0.9	1.0
1988-1990 (1989)	9	1.4	5,897	1.3	1.2	1.1	1.2
1987-1989 (1988)	24	1.4	5,771	1.3	1.5	1.1	0.9
1986-1988 (1987)	14	1.5	5,629	1.3	1.5	1.2	1.0
1985-1987 (1986)	15	1.2	5,622	2.4	1.2	0.5	1.0
1984-1986 (1985)	13	1.5	5,525	2.3	1.3	0.7	1.2
1983-1985 (1984)	21	2.1	5,594	2.4	1.4	0.9	1.6
1982-1984 (1983)	25	2.4	5,709	2.5	1.4	1.0	1.9
1981-1983 (1982)	18	2.5	5,639	2.5	1.2	1.0	2.2
1980-1982 (1981)	20	2.6	5,733	2.5	1.2	1.0	2.2
1979-1981 (1980)	29	3.1	6,076	2.7	1.6	1.2	2.0
1978-1980 (1979)	29	3.3	5,687	2.6	1.8	1.4	2.0
1977-1979 (1978)	26	3.2	6,201	1.9	1.8	1.8	1.9
1976-1978 (1977)	28	3.5	6,156	2.0	1.8	2.1	2.3
1975-1977 (1976)	37	4.0	6,261	2.1	1.9	2.3	2.5
1974-1976 (1975)	36	5.0	6,558	2.2	2.1	2.6	2.8
1973-1975 (1974)	44	5.3	7,066	2.4	2.3	2.5	2.7
1972-1974 (1973)	37	6.2	7,371	2.6	2.4	2.7	2.9
(1972)	43						
1954-1956 (1955)	165	15.4		3.6	3.1	4.3	5.0

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified. Starting in 1979 cause-of-death codes which define gastrointestinal deaths were revised to exclude ICD-9 code 557 (vascular insufficiency of intestine). Currently ICD-9 codes that define gastrointestinal disease deaths include: 004, 006, 007, 008, 009, 535, 555, 556, 558, and 562.

Chart 4.32***Age-Adjusted Acquired Immunodeficiency Syndrome (AIDS) Death Rates***

The number of AIDS deaths for American Indians and Alaska Natives residing in the entire U.S. in 1991 (76) is nearly 4 times the number in 1987 (20). For Indians residing in the IHS service area (about 60 percent of all U.S. Indians), there is nearly a 5 to 1 ratio between 1991 and 1987 (38 to 8). In contrast, the same ratio for the U.S. All Races population is closer to 2 to 1.

**Table 4.32*****Acquired Immunodeficiency Syndrome (AIDS) Deaths and Mortality Rates***

American Indians and Alaska Natives, U.S. and IHS Service Area, and U.S. All Races and White Populations, 1987-1991
Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native				U.S. All Races		U.S. White Rate
	Entire United States		IHS Service Area				
	Number	Rate	Number	Rate	Number	Rate	
(1991)	76		38		29,555	11.7	9.4
1989–1991 (1990)	36	2.5	16	2.1	25,188	10.1	8.3
1988–1990 (1989)	36	1.7	16	1.4	22,082	8.9	7.3
1987–1989 (1988)	26	1.4	13	1.2	16,602	6.8	5.4
(1987)	20		8		13,468	5.5	4.5

NOTE: Includes causes of death with ICD-9 Codes 042-044, first classified in 1987. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified. Age-adjusted rates based on less than 50 deaths during a 3-year period should be interpreted with caution.

Chart 4.33

Life Expectancy at Birth

Life expectancy at birth for American Indians and Alaska Natives in 1972-1974 was over 10 years less than the life expectancy of the U.S. All Races and White populations in 1973. For 1989-1991 versus 1990, the gap with the U.S. All Races population has narrowed to 2.2 years and with the White population to 2.9 years.

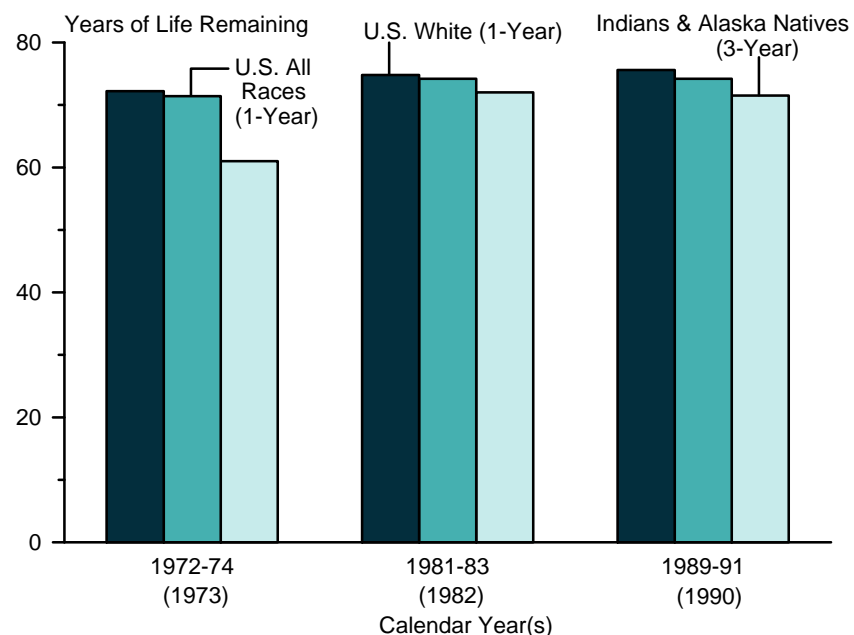


Chart 4.34

Years of Productive Life Lost

The years of productive life lost rate for American Indians and Alaska Natives in 1989-1991 (86.7 per 1,000 population under age 65) is less than half of what it was in 1972-1974 (188.3). Although the ratios have decreased considerably over this time period, the Indian rate is still 1.54 times the U.S. All Races rate (56.2) and 1.97 times the White rate (44.0) in 1990.

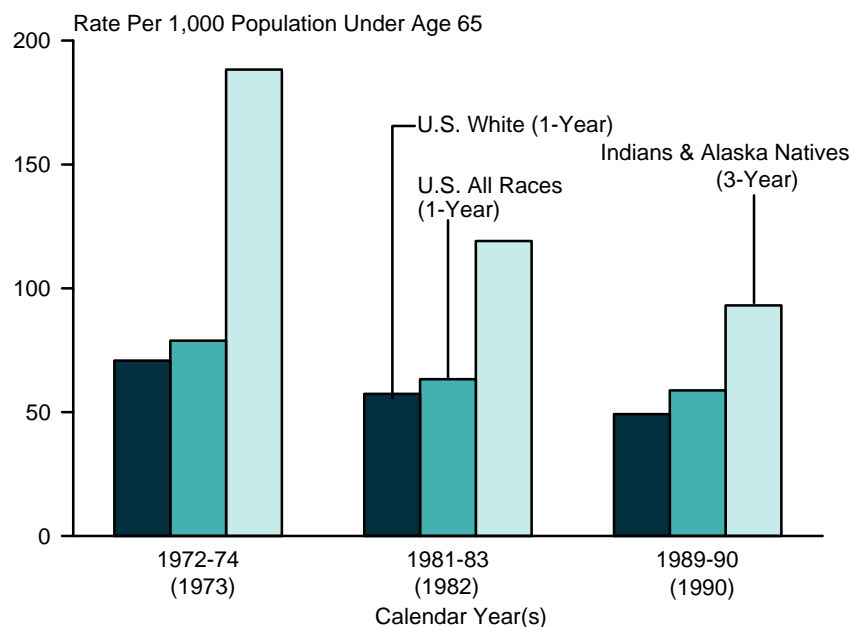


Chart 4.35
Age-Adjusted Mortality Rate

The age-adjusted mortality rate (all causes) for American Indians and Alaska Natives has decreased 42 percent from 1972-1974 (1,007.4 per 100,000 population) to 1989-1991 (585.2). From 1973 to 1990, the U.S. All Races rate decreased 25 percent (692.9 to 520.2) as did the White rate (659.3 to 492.8).

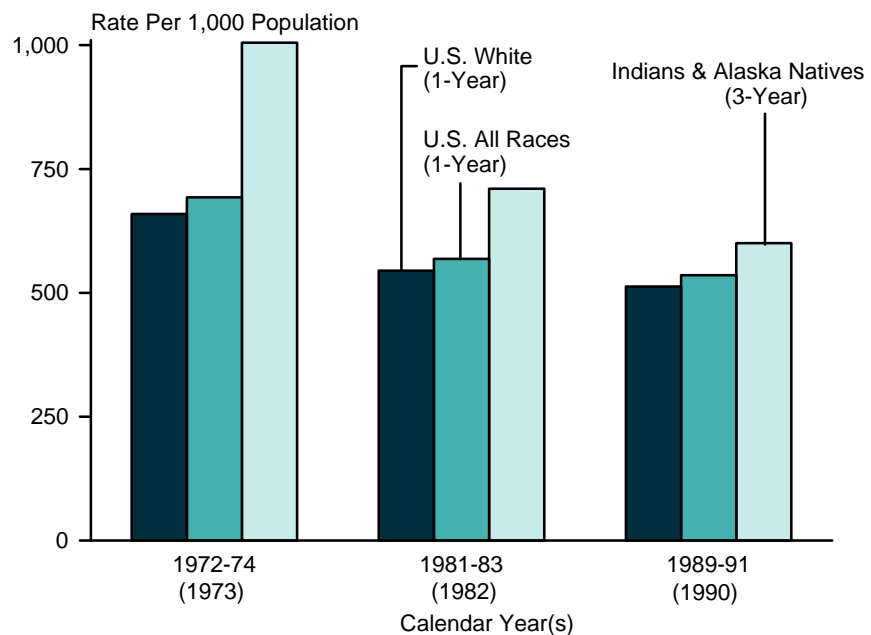


Table 4.33
Overall Measures of Indian Health

IHS Service Area Population Compared with the U.S. All Races and White Populations

	Life Expectancy At Birth (Years)	Years of Productive Life Lost (Rate per 1,000 Population Under Age 65)	Age-Adjusted Mortality Rate (per 100,000 Population)
IHS Service Area:			
1989-1991	73.2	86.7	585.2
1981-1983	71.3	108.1	658.7
1972-1974	61.0	188.3	1,007.4
U.S. All Races:			
1990	75.4	56.2	520.2
1982	74.5	59.0	553.8
1973	71.4	78.9	692.9
U.S. White:			
1990	76.1	44.0	492.8
1982	75.1	55.1	531.8
1973	72.2	70.8	659.3
RATIO: IHS to U.S. All Races:			
1989-1991(1990)	0.97	1.54	1.12
1981-1983(1982)	0.96	1.83	1.19
1972-1974(1973)	0.85	2.39	1.45
RATIO: IHS to U.S. White:			
1989-1991(1990)	0.96	1.97	1.19
1981-1983(1982)	0.95	1.96	1.24
1972-1974(1973)	0.84	2.66	1.53

